



Burlington**hydro**

APRIL 16, 2025

Burlington Hydro Inc. Distribution System Plan

2026 Cost of Service Application



Historical Period:

2021 – 2025

Forecast Period:

2026 – 2030

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List of Acronyms

Acronym	Meaning
ACA	Asset Condition Assessment
ADMS	Advanced Distribution Management System
AMI	Advanced Metering Infrastructure
BEC	Burlington Enterprises Corporation
BESI	Burlington Electricity Services Inc.
BHI	Burlington Hydro Inc.
BJUC	Burlington Joint Utilities Committee
CAIDI	Customer Average Interruption Duration Index
CATC	Capacity Allocated to Customers
CDM	Conservation Demand Management
CHI	Customer Hours Interrupted
CI	Customers Interrupted
CIS	Customer Information System
CSA	Canadian Standards Association
CUTRIC	Canadian Urban Transit Research and Innovation Consortium
DER	Distributed Energy Resources
DERMS	Distributed Energy Resource Management System
DGA	Dissolved Gas Analysis
DSC	Distribution System Code
DSO	Distribution System Operator
DSP	Distribution System Plan
ERP	Enterprise Resource Planning
ESA	Electrical Safety Authority
FLISR	Fault Location, Isolation, and Service Restoration
GIS	Geographic Information System
GS	General Service
GTHA	Greater Toronto and Hamilton Area
HI	Health Index
HONI	Hydro One Networks Inc.

Acronym	Meaning
HV	High Voltage
ICM	Incremental Capital Module
IEEE	Institute of Electrical and Electronics Engineers
IESO	Independent Electricity System Operator
IRRP	Integrated Regional Resource Plan
LDC	Local Distribution Company
LOS	Loss of Supply
LTEP	Long Term Energy Plan
MED	Major Event Day
MS	Municipal Station
MTO	Ministry of Transportation
OEB	Ontario Energy Board
OH	Overhead
OMS	Outage Management System
ONMAG	Ontario Mutual Assistance Group
PSWHA	Public Service Work Highway Act
REG	Renewable Energy Generation
RER	Regional Express Rail
RIP	Regional Infrastructure Plan
RFP	Request for Proposal
RRFE	Renewed Regulatory Framework for Electricity Distributors
SAARI	System Average Auto Reclose Index
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
SCADA	Supervisory Control and Data Acquisition
SQR	Service Quality Requirements
TOU	Time of Use
TS	Transmission Station
UG	Underground
USF	Utility Standards Forum
VVO	Volt-Var Optimization

5.2 Distribution System Plan

Burlington Hydro Inc. (“BHI”) has prepared this Distribution System Plan (“DSP”) in accordance with the Ontario Energy Board’s (“OEB” or “Board”) Chapter 5 – Distribution System Plan Filing Requirements for Electricity Distribution Rate Applications, dated December 9, 2024 (the “Filing Requirements”) as part of its 2026 Cost of Service Application (the “Application”).

The DSP is a stand-alone document that is filed in support of BHI’s Application. The DSP’s duration is ten years in total, including the historical period from 2021 to the 2025 Bridge Year; and a five-year forecast period beginning with the 2026 Test Year and ending in 2030.

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 BHI is \$240k 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

5.2.1.1 Description of the Utility Company

Burlington Enterprises Corporation (“BEC”) is a services company that is wholly owned by the City of Burlington. Burlington Hydro Inc. (“BHI”) and Burlington Electricity Services Inc. (“BESI”) are affiliate companies owned by Burlington Enterprises Corporation. BHI is an Ontario-based local distribution company (“LDC”) that serves the municipality of Burlington. The utility serves approximately 69,000 residential and commercial customers in the City of Burlington over 188 square kilometres of service territory. BHI’s fleet of assets includes:

- 830 km of overhead powerlines
- 686 km of underground powerlines
- 32 substations
- Approximately 15,300 hydro poles
- 3,179 overhead transformers

BHI’s service territory is depicted in Figure 5.2-1: BHI’s Service Territory Map.

1

Figure 5.2-1: BHI's Service Territory Map



2

Purpose

BHI serves the residents and businesses of Burlington with reliable energy, committing to exceptional customer service and empowering customers through valuable tools and resources. BHI is today's reliable energy partner for tomorrow's innovative community.

Strategic Objectives

BHI's strategic objectives focus on delivering reliable service, operational excellence, and financial stability while fostering a positive workforce and adapting to the evolving needs of its customers.

- **Safety:** Provide comprehensive public safety awareness education/communications; and maintain a culture that prioritizes safety for employees and customers.
- **Customer Service:** Provide exceptional internal and external customer service across the organization.
- **Reliability:** Ensure safe, resilient, and reliable electricity distribution to customers.
- **Value-based Rates:** Deliver electricity at prudent and value-based distribution rates.
- **Technology:** Continuous investment in technology that helps reduce electricity costs, provides consumer choice, and creates business value.
- **Infrastructure:** Replace infrastructure where warranted.
- **Efficiencies:** Find continuous efficiencies and cost savings that deliver value to customers and shareholders.

Additional information can be found in BHI's 2025 Business Plan, attached as Appendix B.

5.2.1.2 Capital Investment Highlights

BHI'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 BHI's historical actuals and forecast expenditures for both capital and O&M categories. Refer to Section 5.4 for further details on BHI's capital investments.

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

Category	Historical (\$ '000)					Forecast (\$ '000)				
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
System Access (Gross)	13,263	9,644	25,277	17,736	27,614	35,695	22,707	21,772	23,697	21,530
System Renewal (Gross)	4,175	5,168	5,397	5,658	4,335	6,181	6,219	6,344	6,470	6,601
System Service (Gross)	-	177	265	27	-	510	624	212	325	221
General Plant (Gross)	2,609	2,015	1,467	2,217	2,024	2,580	5,705	2,886	2,563	1,198
Gross Capital Expenses	20,047	17,004	32,407	25,638	33,973	44,980	35,255	31,215	33,055	29,551
Contributed Capital	-8,884	-5,557	-20,342	-10,719	-15,470	-20,708	-10,395	-11,882	-11,536	-10,330
Net Capital Expenses after Contributions	11,163	11,447	12,065	14,919	18,503	24,272	24,860	19,334	21,519	19,221
System O&M	10,691	10,407	11,693	11,342	12,755	13,904				

2 **The amounts stated for 2025 are the budgeted amounts*

3 **5.2.1.2.1 System Access**

4 Capital investments in the System Access category over the forecast period are driven by
 5 customer service requests, third-party infrastructure development requirements, and mandated
 6 service obligations. The timing of these mandatory investments is largely driven by the needs of
 7 external parties. BHI regularly coordinates with these external parties to identify future capacity
 8 and other requirements to be incorporated into its capital expenditure plan, as described in
 9 Section 5.2.2.

10
 11 BHI's forecasted System Access expenditures are expected to increase on average from 2025-
 12 2030 as compared to prior years, primarily due to expected growth areas in BHI's service
 13 territory. Some of the key drivers for capital investments under the System Access category for
 14 the Test Year are:

- 15 • System expansions driven by housing developments
- 16 • Transition to the next generation Advanced Meter Infrastructure ("AMI") 2.0 system
- 17 • Customer service requests for new services and upgrades
- 18 • Subdivision developments
- 19 • Infrastructure relocation to accommodate third-party infrastructure developments

1 Refer to Section 5.4.1.2.1 for further details on the forecasted System Access expenditures.

3 **5.2.1.2.2 System Renewal**

4 Expenditures within the System Renewal category are largely driven by the condition of stations
5 and distribution system assets, which play a crucial role in the overall reliability, safety, and
6 performance of the distribution system. BHI's Asset Condition Assessment ("ACA"), which was
7 completed in 2024, and attached as Appendix I to this DSP, helps to identify assets for renewal
8 based on condition data from maintenance, testing, inspections, and infrared scanning records.
9 BHI's Asset Management ("AM") process detailed in Section 5.3 outlines the criteria for asset
10 replacement. The output of the AM process drives the development of the capital expenditure
11 plan and prioritization for System Renewal.

12
13 Over the forecast period of the DSP, several annual System Renewal programs address the
14 need to replace assets at the end of their service lives, including:

- 15 • Underground cable replacements
- 16 • Pole replacements
- 17 • Distribution transformers replacements
- 18 • Station transformer replacements
- 19 • Station relay replacements
- 20 • Substation renewal
- 21 • Switch & Switchgear replacements
- 22 • Municipal Station ("MS") feeder cable replacements

23
24 Refer to Section 5.4.1.2.2 for further details on forecasted System Renewal expenditures.

5.2.1.2.3 System Service

Expenditures in the System Service category are driven by the need to ensure that the distribution system continues to meet operational objectives (such as reliability, grid flexibility, and distributed energy resource (“DER”) integration) while addressing anticipated future customer electricity service requirements (i.e.: station capacity increases, feeder extension, etc.).

Over the forecast period, two key projects are driving the capital spending under the System Service investment category:

- Installation of intelligent switches as part of BHI’s grid modernization efforts
- AMI 2.0 collector system upgrade

Refer to Section 5.4.1.2.3 for further details on forecasted System Service expenditures.

5.2.1.2.4 General Plant

General Plant expenditures are driven by the need to modify, replace or add to non-distribution system assets that support BHI's ongoing 24/7 operations, including:

- Fleet replacement and targeted transitions to Electric Vehicles (EVs)
- Building remediations
- SCADA Replacement and ADMS Acquisition (2027)
- ERP replacement (2028-29)
- Technology hardware and software replacement or enhancements
- Business application enhancements
- Office equipment

Refer to Section 5.4.1.2.4 for further details on forecasted General Plant expenditures.

5.2.1.3 Key Changes since Last DSP Filing

BHI provides the following key changes since its last DSP, which was filed as part of BHI's 2021 Cost of Service application (EB-2020-0007).

Grid Hardening

Grid hardening is a strategic approach BHI uses to assess potential risks in its distribution system and take proactive actions to mitigate those risks, strengthen key infrastructure, and protect customers from potential interruptions. It has now become particularly important due to the increasing frequency and severity of weather-related events driven by climate change.

As part of BHI's initiative to improve resiliency to climate change, it has adopted a holistic approach to invest in targeted network hardening projects to reduce both near-term and long-term climate change risks. There are three main strategies as part of this process that help BHI harden its infrastructure, systems, and services:

1. **Prevent:** Fortify infrastructure to decrease the risk of interruptions.
2. **Mitigate:** Reduce the impact of interruptions on customers.
3. **Respond:** Enhance recovery from interruptions.

BHI is actively pursuing several initiatives to support these strategies, including reinforcing poles and wires, vegetation management, replacing aging infrastructure, and investing in smart grid technologies such as SCADA reclosers, switches, and sensors, to improve reliability and reduce interruption impacts across the grid during severe weather events.

Data Collection & Accuracy Improvements

BHI has improved its data collection regime since 2021 to allow automation through digital inspection platforms (ESRI based) and add more granularity on the inspection forms for each major asset to facilitate more accurate and timely reporting and capture of critical information. The overall Data Availability Index ("DAI") has improved since BHI's last ACA as a result of the improved data collection practices, enabling BHI to make better informed decisions regarding asset condition. As per the recommendations from BHI's previous ACA report, BHI has converted all of its condition parameters to a five-level grading system in order to provide more

defined segregation between assets that need immediate attention and those that can safely remain in-service without intervention in the short-term.

Underground Primary Cable Testing

In 2022, BHI began a proactive underground cable testing initiative as part of its broader effort to improve the reliability of its aging underground distribution system. This testing is critical for identifying potential weaknesses and mitigating the risk of interruptions. The initiative focuses on performing extensive cable testing and infrared inspections in neighborhoods where cable failures have been more frequent. Cable testing collects valuable data on the health of these underground assets which are difficult to inspect. This information is used to determine their health and remaining useful life.

Asset Refurbishment Programs

BHI assesses the feasibility to refurbish, rather than replace, an asset on a case-by-case basis to realize savings and efficiencies associated with deferring capital expenditures while extending the service lives of assets.

BHI is introducing the following programs to extend the service life and defer replacement of certain assets, aligning with BHI's broader asset management strategy:

- Cable injection program to rehabilitate older cables by reducing water tree formation in their insulation, thereby extending their service life at a considerable cost savings compared to replacement. Candidate cable sections are identified through BHI's underground primary cable testing program mentioned above.
- Use of the proprietary PoleEnforcer System¹ ("PoleEnforcer"), a groundline reinforcement which safely reinforces poles with rot at or below their base to preserve the structural integrity of poles and consequently extend their useful lives and mitigate failure risk.

¹ [PoleEnforcer Brochure 11-15.pdf](#)

Submersible Transformer Conversion Program

Initiated in 2022, BHI's Submersible Transformer Conversion Program involves the gradual replacement of BHI's end-of-life submersible transformers with above-ground alternatives. The program addresses the increasing impacts of climate change and aims to enhance reliability and resiliency in areas serviced by submersible transformers. Submersible transformers, installed primarily in the 1980s and 1990s, are situated below ground in vaults, making them highly susceptible to climate-related risks such as flooding and extreme weather. These aging transformers pose safety risks for maintenance crews and are prone to long interruption times when they fail, as accessing and repairing these units is more complex than with above-ground alternatives.

Outage Management System

BHI replaced its Outage Management System ("OMS") in 2025.

BHI's new OMS facilitates better alignment with strategic objectives - specifically, addressing customer needs more effectively and efficiently; and enhancing operational efficiencies. It has improved BHI's ability to manage and respond to power outages and streamline restoration efforts which in turn improves overall grid resiliency. The new OMS will ensure timely, accurate and proactive two-way communication with customers using various communications channels which were not available options in BHI's legacy system. Customers have indicated that they would like to be notified of planned and unplanned outages through texts or email alerts and messages, functionality which was not available in BHI's legacy OMS.

The new OMS provides real time monitoring, automated fault location and reduced downtime. BHI plans to utilize proactive notification, reporting and performance metrics, and integrate with other components of the grid. Enhanced reliability and grid resiliency will help drive down the total cost of ownership in the long term by lowering operational costs and improving asset management. The new OMS will integrate directly with other systems under the ADMS umbrella, providing real-time system visibility and control during outages. This will allow for faster restoration times, improved outage communication to customers, and a more robust outage portal. In addition to operational improvements, the new OMS will streamline the reporting process by automating tasks that were previously handled manually, increasing both

1 efficiency and accuracy. Additionally, the new system is built to support future grid
2 modernization initiatives, enabling advanced functionalities like Fault Location Isolation and
3 Service Restoration (“FLISR”), Volt-Var Optimization (“VVO”), and Distributed Energy
4 Resources Management System (DERMS).

5
6 These capabilities will help BHI continue to reduce outage times, improve system efficiency,
7 enhance customer experience and support the integration of renewable energy sources into the
8 grid. By leveraging real-time data, automation, and integration with advanced technologies, the
9 new OMS enables faster outage detection and resolution, better resource management, and
10 proactive communication with customers.

11 12 **BHI’s Corporate Sustainability Efforts**

13 BHI values the long-term health and sustainability of its operations, the environment and the
14 community it serves. BHI will ensure availability of a future electricity supply that meets
15 customer needs and growth, managing risks to eliminate or minimize adverse impacts
16 associated with its businesses. Specific examples include:

- 17 • Transition to fleet electrification for certain end-of-life vehicles.
- 18 • Investments in electric tools and equipment (e.g., battery operated chainsaws, presses,
19 and other power tools) to limit the use of two stroke motors and exhaust gas emissions.
- 20 • Changes to BHI standards for ‘system hardening’ in response to more extreme weather
21 due to climate change.
- 22 • Support for the City of Burlington’s Climate Action Plan and Electric Mobility Strategy.
- 23 • Engagement of Canadian Urban Transit Research and Innovation Consortium
24 (“CUTRIC”), a non-profit innovation consortium with a vision to make Canada a global
25 leader in low carbon smart mobility. Burlington Transit has engaged CUTRIC to develop
26 and implement a zero-emissions strategy for implementation to its fleet. BHI has been
27 working with CUTRIC to evaluate system capacity constraints on the identified routes for
28 charging infrastructure and for system planning requirements for a larger electric fleet
29 roll out.
- 30 • Member and supporter of Electric Mobility Canada.

- BHI is a member of Utility Standards Forum (“USF”) which is comprised of over 50 LDCs that collaborate on issues including standards changes, industry changes and best practices in respect of electrification and decarbonization.

Health and Safety Environment Management System

BHI implemented a Health and Safety Environment Management System (“HSEMS”) in 2022, a centralized digital platform that allows for the digitization of key safety processes and workflows, including inspections, incident reporting, training tracking, and compliance documentation. As an extension of this system, the SafeTapp app enables mobile access to training records, certifications, policies, and safety procedures, ensuring that employees can access up-to-date information on the go. This integrated, paperless approach enhances workplace safety, improves operational efficiency, and ensures regulatory compliance, contributing to safety excellence and a more responsive workforce.

Wholesale Meter Upgrade at Burlington TS:

Hydro One Networks Inc. (“HONI”) informed BHI in July of 2021 that the potential transformers (“PTs”), which are key elements in the wholesale metering installation at Burlington TS, require imminent replacement due to failure risk. The wholesale metering installation at Burlington TS used obsolete technology which was not compliant with current Independent Electricity System Operator (“IESO”) wholesale metering standards, and consequently the PT replacement triggered the need for BHI to install new IESO-compliant wholesale registered meters. The new feeder meters provide BHI Engineering and Operations staff with more detailed feeder loading information, access to power quality and waveform events to respond to customer inquiries regarding voltage, and visibility to power quality issues if they arise.

Energy Storage Feasibility Study:

In 2024, BHI undertook an energy storage feasibility study. The objective of the study was to explore the feasibility, benefits, and challenges of integrating a battery energy storage system (BESS) into BHI’s grid and to understand how BESS could support local load demands and provide flexibility in discharge and power capacity. The focus area of the study was to evaluate the impact of feeder loads and develop solutions for optimizing peak demand management.

The feasibility study provided BHI with insight as to the potential of a BESS as a non-wires solution (“NWS”) to future capacity constraints. Over the forecast period, BHI will continue to investigate and test solutions that BESS could deploy as part of a wider NWS assessment.

5.2.1.4 DSP Objectives

BHI's DSP objectives are aligned with the four key objectives established in the OEB's Renewed Regulatory Framework (“RRF”) for electricity:

- **Customer Focus:** Services are provided in a manner that responds to identified customer preferences.
- **Operational Effectiveness:** Continuous improvement in productivity and cost performance is achieved, and utilities deliver on system reliability and quality objectives.
- **Public Policy Responsiveness:** Utilities deliver on obligations mandated by the government (i.e.: in legislation and regulatory requirements imposed further to Ministerial directives to the Board).
- **Financial Performance:** Financial viability is maintained, and savings from operational effectiveness are sustainable.

BHI's commitment to strong asset management and planning processes support the achievement of the following DSP objectives:

- **Invest in Reliability and Resiliency**
 - Address declining reliability, due to the failure of aging infrastructure, through increased asset renewal and refurbishment.
 - Ensure the distribution system is prepared for the impacts of climate change through strategic asset renewal and complementary grid hardening efforts such as the use of PoleEnforcer and cable injection.
 - Expand the 'Intelliteam Smart Grid Automatic Restoration System' network through continued investment in intelligent switches and other grid automation investments. These technologies can integrate seamlessly with ADMS functionality, automating routine grid operations and expediting system restoration during abnormal conditions.

1 • **Deliver Capacity to Meet Customer and Load Growth**

- 2 ○ Ensure the distribution system can meet the demands of public policy changes
3 (e.g. More Homes Built Faster Act, 2022), including with respect to the rapidly
4 evolving housing needs in BHI's service territory, such as development around
5 Major Transit Station Areas ("MTSAs"), which will require additional capital
6 investments to build and connect.
7 ○ Accommodate third-party requests related to infrastructure renewal and
8 expansion projects that require BHI to relocate its existing infrastructure.
9 ○ Respond to evolving policy and customer expectations in response to the energy
10 transition, such as electrification of home heating and transportation.
11 Electrification of transit and home heating requires additional capital expenditures
12 to support grid modernization, manage peak demand, integrate renewable energy
13 and ensure the grid can handle the growing demand for electricity.

14 • **Modernize BHI's Grid and Operations**

- 15 ○ Transition to the next generation AMI 2.0 system with real-time integration with
16 BHI's OMS and Customer Information System ("CIS").
17 ○ Upgrade BHI's SCADA system including implementation of an ADMS to
18 modernize grid management capabilities in response to increased demand,
19 electrification, and DER penetration.
20 ○ Continue investment in cybersecurity tools and platforms to enhance cyber
21 security readiness in accordance with the Ontario Cyber Security Framework²
22 (OCSF) and the OEB's Ontario Cyber Security Standard³.
23 ○ Modernize aging fleet assets including strategic transition to EVs.

² Ontario Cyber Security Framework (OCSF) v 1.1, December 7, 2023

³ Ontario Cyber Security Standard, March 27, 2024

5.2.2 Coordinated Planning with Third Parties

5.2.2.1 Customer Consultations

BHI engages with its customers on an ongoing basis through a variety of channels such as an annual customer satisfaction survey for residential and small business customers, large customer surveys, daily customer service interactions, community outreach, and through social media platforms such as X (formerly Twitter), Instagram and Facebook. Engagements are typically initiated by BHI, primarily through its own staff and sometimes through consultants (i.e., UtilityPULSE, Decision Partners) with expertise in polling and gathering public input. Participants normally include a mix of residential, general service, industrial and commercial customers. Customer engagement is often carried out through BHI's website, social media channels and customer engagement events.

UtilityPulse Annual Survey

Over the historical period, BHI partnered with UtilityPULSE to conduct four customer satisfaction surveys in 2021, 2022, 2023, and 2024. Results from these surveys are detailed in BHI's Scorecards which are available on the OEB website⁴.

In 2024, the UtilityPULSE customer satisfaction survey had 433 respondents, of which 85% were residential customers and 15% were commercial customers. Interviews were conducted over the telephone or online. In 2024, the most frequent suggestion from respondents was "better prices," which has consistently been the top suggestion over the past 25 years. The second most frequent suggestion was "keep up the good work." In response to this survey, UtilityPULSE issued a Report Card whereby BHI scored a 92% customer satisfaction rate and a grade of "A". The UtilityPULSE Report Card evaluates six drivers: price and value; customer service; company leadership; corporate stewardship; operational effectiveness; and power quality and reliability.

⁴ Ontario Energy Board, [Electricity Utility Scorecards](#)

Application-Specific Customer Engagement

BHI conducted an extensive customer engagement exercise as part of its 2026 Cost of Service application consisting of two phases, including soliciting feedback from customers on its major investments proposed for 2026 to 2030. In total, more than 3,500 residential, small commercial and large commercial/industrial customers across a diverse cross-section of the Burlington community participated in the Customer Engagement process.

The iterative design of the Customer Engagement process was intended to enable BHI to first gain in-depth insight into the needs, values, interests, and priorities of its customers through foundational Customer Interviews conducted in Phase I, which were incorporated into the business planning process. As BHI's plans were refined and the related spending and impacts on customer bills more developed, broader customer feedback was sought from a larger sample of customers through a Web Survey and Key Customer Webinar conducted in Phase II. BHI used this insight throughout its business planning process to ensure its Application is aligned with the needs and preferences of its customers.

The results of the engagement show that customers are aligned with BHI's strategic priorities of providing safe and reliable electricity at prudent rates. Tactical priorities that customers are most aligned with include proactively replacing deteriorated infrastructure, upgrading the distribution system to respond to increasing extreme weather, and investing in new and innovative technology to modernize the grid.

More than 90% of customers agreed that BHI's capital expenditure priorities are important, with more than 85% saying that the level of spending was appropriate. A subset of customers (<20%) indicated that the overall bill impact of BHI's proposed plan wasn't appropriate – BHI incorporated this feedback into its plan through targeted reductions and re-pacing of expenditures to mitigate the overall bill impact.

Further details on BHI's application-specific customer engagement are provided in Section 1.5.3 of Exhibit 1 of this Application.

5.2.2.2 Housing Developers

Housing developers host regular project review meetings with the Region, the City of Burlington and BHI. The purpose of these meetings is to facilitate the planning and execution of new subdivision projects to connect new customers to the grid.

Consultations with developers are critical to gain necessary information such as load demand, construction phasing, and location on feeders to assess capacity and allocate budget and resources for System Access investments, including residential expansions and individual secondary services. A detailed breakdown of the System Access expenditure forecast is provided in Section 5.4.1.2.1.

5.2.2.3 Municipalities

BHI participates in the Burlington Joint Utilities Committee (“BJUC”). This is an ongoing process in which utilities, telecommunications and regulatory organizations share information to efficiently coordinate various projects. In particular, stakeholders discuss new projects and significant developments in ongoing projects. The following participants typically attend the BJUC meetings:

- City of Burlington;
- BHI;
- Bell Canada;
- Cogeco Connexion;
- Enbridge Gas Inc.;
- Halton Region;
- Rogers Communications; and
- Trans Northern Pipelines Inc.

Meetings are held every second month. Projects that BHI has discussed during these consultations include:

- Metrolinx Corridor Electrification project;
- Dundas St Road Widening project;

- Burloak Grade Separation project;
- Pole relocations involved in Prospect Street Reconstruction; and
- Pole relocations involved in the Regional Express Rail (“RER”) (as discussed in Section 5.2.2.8).

Consultations with third parties during the BJUC meetings are critical to forecasting System Access investments including residential expansions, individual secondary services, new commercial and industrial services, and third-party infrastructure development requests. Planned projects are used to forecast the capital requirements of the five-year DSP.

5.2.2.4 Transmitter

BHI engages with HONI through their Regional Planning process (see Section 5.2.2.7).

5.2.2.5 Other LDCs

Consultations with other LDCs regularly occur to discuss common issues and coordination opportunities to improve project efficiency and consistency and realize benefits. In addition, BHI coordinates with other LDCs for the purpose of managing shared assets, including certain transformer station facilities that it shares with Oakville Hydro and Milton Hydro. BHI shares borders with Oakville Hydro, Milton Hydro, Alectra Utilities, and Hydro One. Discussions occur on an ad hoc basis at industry events, mutual coordination meetings, and planned meetings for specific projects.

The consultations cover the following types of projects and activities:

- System planning and loading issues on the shared Transformer Stations with Milton Hydro and Oakville Hydro.
- The Burloak Grade Separation project on Burloak Drive. This road is the border between Burlington and Oakville and the grade separation project involves both LDC’s assets. This collaboration on design and relocation can facilitate achieving efficiencies.
- Dundas St. road widening projects at the border of BHI’s service territory (Tremaine Road) also required coordination with Oakville Hydro and Milton Hydro.

- Collaboration with the other Halton Region LDCs (i.e., Halton Hills Hydro, Oakville Hydro, Milton Hydro) as required to address the installation initiatives around broadband technologies (e.g. compliance with the Building Broadband Faster Act) for priority access to poles to support high-speed internet access to residents and businesses.

5.2.2.6 IESO

BHI engages with the IESO on the Renewable Energy Generation (“REG”) investment process (discussed in Section 5.2.2.10) and the regional planning process (discussed in Section 5.2.2.7).

5.2.2.7 Regional Planning Process

BHI participates in infrastructure planning on a regional basis to ensure regional issues and requirements are effectively integrated into its planning processes. BHI also participates in various joint committees with other utilities, transportation companies and developers to ensure its distribution system planning process is informed and coordinated with relevant parties. Electricity system planning in Ontario is generally carried out at the following three levels:

- Bulk system planning;
- Regional system planning; and
- Distribution system planning.

Planning at the bulk system level typically involves the broader power system and addresses issues that impact the system on a provincial level, while planning at the regional and distribution levels addresses issues on a more regional or localized level.

The bulk power system transmits large loads both within Ontario (as between major generation sources and load centres), as well as between the provincial grid and neighbouring power systems external to the province via the interconnections. The IESO has accountability for the integrated planning of the bulk power system.

1 Regional planning addresses supply and reliability issues at regional and local levels, largely
2 considering portions of the power system that supply various parts of the province. There are
3 portions of the power system which can be electrically grouped together due to their bulk supply
4 points and their electrical inter-relationships whereby common facilities may impact many
5 connected customers.

6
7 Regional planning focuses on the facilities that provide electricity to transmission connected
8 customers, such as distributors and large transmission connected customers. This typically
9 includes the transformer stations supplying the load and the transmission supply circuits to
10 these stations. It also includes the 115/230 kV auto-transformers and their associated
11 switchyards.

12
13 LDCs conduct wires (and resource) planning at the distribution level and coordinate with HONI
14 Transmission and the IESO mainly on transmission supply facilities. BHI has coordinated new
15 or enhanced transmission supply facilities for some of its stations.

16 Regional planning can overlap with bulk system planning and distribution system planning.
17 Overlaps with distribution system planning occur largely at the transformer load stations which
18 deliver power to distributors, and at large directly connected customers. Planning for the
19 construction of transformer load stations, can sometimes take place at the distribution level.
20 Another example where regional planning may require coordination with distribution planning
21 occurs when a distribution solution may address the needs of the broader local area or region,
22 for example, by providing load transfer capability between transformer stations.

23 24 **5.2.2.7.1 Needs Assessment**

25 A needs assessment was carried out by HONI for the Burlington to Nanticoke region from May
26 to September 2022. The purpose of the needs assessment was to identify any new needs for
27 the region as well as recommend a path forward for each need by either developing a preferred
28 plan or identifying which needs require further assessment and/or regional coordination. The
29 needs assessment utilized various inputs and information regarding capacity needs, reliability
30 needs, operational issues, and major high-voltage (HV) transmission assets requiring
31 replacement over the planning horizon.

The report identified several needs in the region that may require further regional coordination and concluded that these needs should be reviewed further under the IESO-led Scoping Assessment process. The needs assessment did not identify any needs within BHI's service area.

- **Purpose:** To identify any new needs and/or to reconfirm needs identified in the previous planning cycle that require regional coordination.
- **Participants:** HONI, IESO, BHI, Alectra Utilities, Oakville Hydro, and Grandbridge Energy.
- **Status:** Complete.
- **Deliverables:** Needs assessment Report issued by HONI on September 6, 2022 attached as Appendix C to this DSP.

5.2.2.7.2 Scoping Assessment

A Scoping Assessment Outcome Report was developed by the IESO for the Burlington Nanticoke region in December 2022. The main outcome of the Scoping Assessment is the identification of the best planning approach for each need identified in the needs assessment ("NA"). The Scoping Assessment concluded that a full scope Integrated Regional Resource Plan ("IRRP") is necessary for the Hamilton sub-region and that reduced scope IRRPs are necessary for the Brant and Caledonia-Norfolk sub-regions. There is no further coordinated regional planning required for the Bronte sub-region at this time. There were no needs identified relating to BHI's service area at this time either.

- **Purpose:** To further review the needs identified, in combination with information collected as part of the NA and information on potential wires and NWS, in order to assess and determine the best planning approach for the whole or parts of the region.
- **Participants:** IESO in collaboration with the Burlington Nanticoke regional participants.
- **Status:** Complete.
- **Deliverables:** Scoping Assessment Outcome Report issued by IESO on December 5, 2022 (see Appendix D).

5.2.2.7.3 Integrated Regional Resource Plan

The latest IRRP developed for the Bronte Sub-region was published in June 2016. Based on the needs assessment and Scoping Assessment in from 2022, it was concluded that no further coordinated regional planning is required at this time for the Bronte Sub-region.

- **Purpose:** To provide recommendations to address the electricity needs of the sub-region over the next 20 years.
- **Participants:** IESO, HONI Distribution and Transmission, Oakville Hydro, and BHI.
- **Status:** Complete.
- **Deliverables:** Integrated Regional Resource Plan – Bronte Sub-region attached as Appendix E to this DSP.

5.2.2.7.4 Regional Infrastructure Plan

The latest Regional Infrastructure Plan (“RIP”) developed for the Burlington to Nanticoke region was published in October 2019. Based on the needs assessment and Scoping Assessment in from 2022, it was concluded that no further coordinated regional planning is required at this time for BHI’s service area.

- **Purpose:** To develop an electricity infrastructure plan to address electrical supply needs identified in previous planning phases and any additional needs identified based on new and/or updated information.
- **Participants:** IESO, HONI Distribution and Transmission, Brantford Power, BHI, Energy+, Alectra Utilities, and Oakville Hydro.
- **Status:** Complete.
- **Deliverables:** Burlington to Nanticoke Regional Infrastructure Plan attached as Appendix F to this DSP.

5.2.2.8 Metrolinx and ONxpress Consultation

Metrolinx, an agency of the Province of Ontario, is upgrading and expanding its commuter rail system under the Regional Express Rail (“RER”) project. As part of the RER, Metrolinx is electrifying GO-owned corridors. The GO Rail Network Electrification undertaking will entail design and implementation of a traction power supply system and power distribution components located along and within the vicinity of the rail corridors.

BHI is actively involved with Metrolinx in order to support the design, planning and construction activities associated with the Lakeshore West GO Line expansion and electrification project. BHI developed engineering designs and completed the approval, permitting and construction stage of multiple phases with Metrolinx over the 2021-2024 period. The project scope included the installation of 133 poles, four underground crossings underneath the tracks at four different locations, and three underground crossings underneath three different bridges. The project was fully funded by Metrolinx, with the exception of expenditures associated with installing additional ducts in underground systems to accommodate future feeders.

The design phase was completed in 2019 and BHI commenced construction in 2020 with the actual relocation work completed in 2024. As part of the next phase of GO Rail Network Electrification BHI is continuing its engagements with ONxpress Transportation Partners (“ONxpress”) to provide low voltage service connection to 14 signal stations along the railway tracks and in the process, relocating its underground assets from Brant Street to Drury Lane to accommodate the new equipment. Additionally, BHI will supply low voltage service to the proposed Metrolinx Substation building on Cumberland Avenue (besides Cumberland Transformer Station). The initial scope of work, design and construction schedule are being discussed for finalization in 2025.

Metrolinx has partnered with ONxpress, who is responsible for all works that facilitate train service, such as track, civil infrastructure, signaling, electrification infrastructure and electric vehicles, as well as the operations and maintenance of the GO Rail network.

5.2.2.9 Telecommunication Entities

BHI regularly engages with telecommunications companies that operate within its service area, through both Municipal Consent applications and regular Burlington Joint Utility Coordination (BJUC) meetings arranged through the City of Burlington. For large scale capital project and as part of the Municipal Consent application process, project information including detailed design plans are sent to various third parties for their input, including telecommunication service providers that are joint use owners or are potentially impacted. Projects include new developments, road widening, and other infrastructure projects. A schedule of some of these direct engagements is listed in Table 5.2-2 below:

Table 5.2-2: Summary of Direct Consultations

Date of Consultation	Consultation Overview	Participants
December 2023	Email	Rogers
July 2024	Email	Cogeco; Bell
September 2024	Email	Cogeco; Bell
November 2024	Email	Cogeco

BJUC meetings are the other forum for direct engagement with telecommunication service providers. These meetings provide members the opportunity to collaborate for potential cost savings through joint use or avoid potential conflicts within the municipal corridors or other rights-of-way. These consultations facilitated more efficient planning on projects that impacted both telecommunications and energy infrastructure, ensuring minimal service disruption to customers. Table 5.2-3 provides a summary of recent BJUC meetings.

Table 5.2-3: Summary of Consultations (BJUC)

Date of Consultation	Consultation Overview	Participants
May 2024	Meeting	Rogers, Cogeco, Bell
September 2024	Meeting	Rogers, Cogeco, Bell

Results of Consultation

During these consultations BHI and telecommunications providers discussed coordination on several of BHI's ongoing and upcoming capital projects. By incorporating feedback from these consultations, BHI has ensured that its capital investments are properly coordinated with telecommunications entities, minimizing potential conflicts, and supporting the provision of reliable telecommunications services within its service area.

Joint Use for 5-G Microcell Installation

BHI is in the process of negotiating a Joint-Use agreement with Halton Digital Access Service Corporation (HDASC), a municipal services corporation intended to provide a coordinated process/platform across the Halton Region for telecom companies to attach to municipal and LDC owned infrastructure. The Joint-Use agreement is seeking to consolidate the licensing and permitting of BHI pole positions to Telecommunication Companies to ensure an efficient, consistent and integrated approach to the placement of Microcell Equipment across BHI's Service territory. This agreement will authorize one agency (HDASC) as a one-stop-shop for participating telecom service providers to obtain attachment permits through an exclusive and standardized approach. This will facilitate the expansion of 5G cellular services without compromising the safety, reliability and quality of distribution service by BHI.

5.2.2.10 Renewable Energy Generation (REG)

BHI has no significant investments planned to facilitate new DER connections over the 2026-2030 period and has submitted this REG Integration Plan to the IESO in October 2024. This is attached as Appendix G.

5.2.2.10.1 IESO Comment Letter

In compliance with Section 5.2.2.2 of the DSP Filing Requirements, BHI formally requested a letter of comment from the IESO with respect to its planned REG investments. As BHI does not have any planned REG investments over the 2026 to 2030 period, the IESO responded with no comments. BHI's report on its REG Investment Plan and the IESO Comment Letter are included in Appendix G and Appendix H.

5.2.3 Performance Measurement for Continuous Improvement

5.2.3.1 Distribution System Plan

In addition to the performance metrics on its electricity distributor scorecard, BHI committed to several continuous improvement objectives as part of its last DSP.

5.2.3.1.1 Reliability Objectives

BHI included several reliability metrics, including CAIDI (excluding Loss of Supply (“LOS”) and Major Event Days (“MEDs”) and Customer Hours of Interruption due to Defective Equipment, in its last DSP. As part of the Settlement Agreement in its last Cost of Service application, BHI also committed to tracking SAIDI and SAIFI due to Defective Equipment (with corresponding targets) to track the progress of its DSP⁵. The targets from BHI’s previous application, along with its actual results, are identified in Table 5.2-4 below.

Table 5.2-4: Additional Metrics from Previous DSP and Settlement Proposal

	2021		2022		2023		2024	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual
CAIDI (Excluding LOS and MEDs)	1.59	1.45	1.59	1.57	1.59	1.30	1.59	1.43
Customer Hours of Interruption due to Defective Equipment	28,399	24,900	28,399	44,105	28,399	39,881	28,399	58,917
SAIDI (Excluding MEDs) caused by Defective Equipment	0.42	0.36	0.41	0.64	0.46	0.58	0.49	0.85
SAIFI (Excluded MEDs) caused by Defective Equipment	0.29	0.15	0.26	0.37	0.29	0.37	0.30	0.54

BHI achieved its CAIDI target from 2021-2024 indicating the duration of an average interruption improved vs. the previous 5-year period upon which the target was based on.

⁵ EB-2020-0007, Settlement Proposal, p13

BHI achieved its target for Customer hours of Interruption due to Defective Equipment and SAIDI / SAIFI caused by Defective Equipment in 2021, but performance against these metrics was worse than target from 2022-2024. BHI experienced higher than expected asset failures resulting in increased customer interruptions from 2022-2024, specifically related to underground cables and switches.

BHI is proposing increased investment in System Renewal programs in this DSP to address the deteriorating trend in this performance. BHI is also introducing several asset refurbishment practices aimed at extending the useful life of specific asset classes (discussed further in Section 5.3.3) to further address customer interruptions as a result of defective equipment.

5.2.3.1.2 Asset Condition Objectives

In its last DSP BHI established performance metrics to track the percentage of assets in very poor and poor condition for three asset classes over the course of the previous DSP period. The targets from BHI's previous DSP, along with its actual results, are identified in Table 5.2-5 below.

Table 5.2-5: Asset Condition Measures

Asset Class	Target	% of Assets in Poor or Very Poor Condition	
		2020 ACA	2024 ACA
Wood Pole (% in poor or very poor Condition)	Improve	5%	7%
MS Feeder Cables (% in poor or very poor Condition)	Improve	11%	14%
Station Switchgear (% in poor or very poor Condition)	Improve	77%	45%

MS feeder cables and wood poles have shown increasing deterioration, with the percentage of these assets classified as poor or very poor rising between 2021 and 2024. BHI made significant investments in these asset classes over the historical period but still saw a deterioration partly due to the high number of reactive replacements, which reduced the available budget to fund targeted asset replacements.

BHI is proposing increased investment in the pole replacement and MS feeder cable replacement programs in this DSP to address the deteriorating trend in the health of these assets. BHI is also introducing PoleEnforcer which safely reinforces poles with rot at or below their base to preserve structural integrity, which consequently extends their useful lives and improves their overall health index.

There has been an overall improvement in the condition of station switchgears over the 2021-2024 period driven by BHI's proactive replacement program.

5.2.3.1.3 Tracking Reactive vs. Proactive Expenditures

As part of the Settlement Agreement in its last Cost of Service application, BHI committed to tracking reactive capital expenditures separately from proactive capital expenditures for seven of its capital programs⁶. BHI has achieved this objective and provides the results of this tracking in Table 5.2-6 below.

⁶ EB-2020-0007, Settlement Proposal, p13

1

Table 5.2-6: Reactive vs Proactive Asset Replacements

		2021		2022		2023		2024	
Program	Reactive/ Proactive	Qty	\$000	Qty	\$000	Qty	\$000	Qty	\$000
MS Feeders Cable Replacement (meters)	Proactive	1,784	129	0	12	1,381	135	0	0
	Reactive	520	95	3,113	293	0	0	0	4
Pole Replacement Program (units)	Proactive	69	915	51	711	77	1,032	75	1,130
	Reactive	15	203	26	421	32	340	18	302
Replacement Substation Circuit Breakers (units)	Proactive	3	118	3	158	2	113	2	93
Station Transformer Replacement Program (units)	Proactive	1	319	1	1,011	0	205	1	476
	Reactive	0	0	0	0	0	0	0	32
Switch Replacement Program (units)	Proactive	17	205	3	38	29	146	9	141
	Reactive	15	144	16	338	27	471	17	272
Switchgear Replacement Program (units)	Proactive	2	293	1	100	0	2	2	159
	Reactive	0	0	0	0	0	0	0	0
Transformer Replacement (units)	Proactive	14	201	1	63	14	193	16	255
	Reactive	32	421	37	285	32	420	75	734
Underground Rebuilds (meters)	Proactive	1,038	181	90	106	0	18	1,788	246
	Reactive	1,549	634	3,856	894	7,675	1,957	1,199	1,035

2

3 This information has helped to inform BHI's forecasted capital expenditures as described in
4 Section 5.4.1.2.

5

6 **5.2.3.1.4 Unit Cost Objectives**

7 As part of the settlement agreement in its last Cost of Service application, BHI committed to
8 tracking unit costs for wood poles, primary underground cable, and station primary switchgear⁷.
9 BHI's results over the historical period are provided in Table 5.2-7.

⁷ EB-2020-0007, Settlement Proposal, p13

Table 5.2-7: Unit Pricing

Unit Costs	2021	2022	2023	2024
Wood Poles	\$13,303	\$14,702	\$12,588	\$17,340
Station Primary Switchgear Replacements	\$146,465	\$100,102	N/A	\$79,413
UG Primary Cable (per meter)*	\$287	\$205	\$223	\$321

* The Underground Rebuilds program includes both Primary and Secondary cable replacements, whereas the above unit cost only reflects Primary cable replacement.

Variations in pole replacement costs are influenced by several factors, including the type and height of poles installed (e.g., 55-70 foot poles versus 35-50 foot poles), the urgency of the work, the number of circuits being supported, and whether existing hardware needed replacement. Installation costs also differ based on whether the work occurred during regular hours or at overtime rates in response to failures which occurred outside of regular working hours.

In 2021, BHI replaced a more expensive pad-mounted primary station switchgear, while in 2022 a less costly overhead switchgear was installed, leading to variability in unit costs.

Higher unit costs for underground primary cable replacements in 2021 and 2024 were due to an increase in reactive replacements, which have a higher replacement cost than proactive replacements. Higher cable material costs also contributed to the increases in 2023 and 2024.

This unit cost information has informed the update of BHI's costing assumptions which are used as inputs into program costs over the forecast period.

5.2.3.2 Service Quality and Reliability

BHI's service quality and reliability performance are provided below in the following subsections.

5.2.3.2.1 Service Quality Requirements

BHI's Service Quality Requirements ("SQR") performance for the historical period is summarized in Table 5.2-8. BHI confirms this data is consistent with its scorecard. Explanations for any material changes, missed targets or declining trends, and whether and how the DSP addresses these issues, is provided below.

Table 5.2-8: Historical Service Quality Metrics

Service Quality Metric	2020	2021	2022	2023	2024	Minimum Standards
Low Voltage Connections	100.0%	100.0%	99.5%	100.0%	99.69%	> 90%
High Voltage Connections	–	–	–	–	–	> 90%
Telephone accessibility	62.2%	48.9%	68.3%	77.40%	70.52%	> 65%
Appointments met	100.0%	100.0%	100.0%	100.0%	100.0%	> 90%
Written response to enquiries	99.79%	99.46%	99.71%	99.60%	99.82%	> 80%
Emergency Urban Response	96.67%	96.72%	95.95%	93.50%	100.0%	> 80%
Emergency Rural Response	–	–	–	–	–	> 80%
Telephone call abandon rate	8.16%	9.06%	4.76%	5.30%	5.22%	< 10%
Appointment scheduling	99.31%	95.31%	90.96%	95.50%	99.42%	> 90%
Rescheduling a Missed Appointment	100.0%	100.0%	100.0%	100.0%	100.0%	>100%
Reconnection Performance Standard	100.0%	100.0%	100.0%	100.0	100.0%	> 85%
New Micro-embedded Generation Facilities Connected	100.0%	100.0%	100.0%	100.0	100%	> 90%
Billing Accuracy	99.97%	99.97%	99.97%	99.97	99.98	> 98%

BHI has met or exceeded each of its service quality targets over the past five years, with the exception of the telephone accessibility metric in 2020 and 2021. BHI's performance was below target in 2020 due to an increase in the number of customer enquiries about new customer billing and payment programs introduced to offer customers more billing flexibility in response to the COVID-19 pandemic ("COVID-19"). BHI's performance was below target in 2021 due to (i) resources were diverted to the implementation BHI's CIS conversion project; and (ii) an increased volume and duration of customer enquiries regarding the Regulated Price Plan ("RPP") Customer Choice initiative and RPP pricing changes. Reliability Performance

The key metrics that BHI tracks to measure reliability are SAIDI, SAIFI, and CAIDI, measured under the following scenarios:

1. By including all power interruptions.
2. By excluding interruptions due to Loss of Supply (“LOS”).
3. By excluding interruptions due to Major Event Days (“MED”).
4. By excluding interruptions due to both LOS and MEDs.

In addition, the root cause of power interruptions is tracked, monitored and analyzed. BHI uses this information to assess system needs as part of its asset management process.

BHI’s reliability performance over the historical period is shown in the tables and figures below.

Table 5.2-9: Historical Reliability Performance Metrics – All Cause Codes

Metric	2020	2021	2022	2023	2024	Average
SAIDI	1.91	1.53	4.06	3.09	2.23	2.56
SAIFI	1.47	0.97	1.55	1.81	1.60	1.48
CAIDI	1.30	1.57	2.62	1.71	1.43	1.73

Table 5.2-10: Historical Reliability Performance Metrics – LOS and MED Adjusted

Metric	2020	2021	2022	2023	2024	Average
LOS Adjusted						
SAIDI	1.86	1.52	3.95	3.05	2.20	2.52
SAIFI	0.94	0.97	1.33	1.80	1.54	1.32
CAIDI	1.98	1.57	2.97	1.69	1.43	1.93
MED Adjusted						
SAIDI	1.05	1.26	1.52	2.00	2.23	1.61
SAIFI	1.24	0.87	1.07	1.53	1.60	1.26
CAIDI	0.85	1.45	1.42	1.31	1.39	1.29
LOS and MED Adjusted						
SAIDI	1.00	1.26	1.41	1.97	2.20	1.57
SAIFI	0.70	0.87	0.90	1.52	1.54	1.11
CAIDI	1.43	1.45	1.57	1.30	1.43	1.43

Figure 5.2-2: Performance Measure: SAIDI

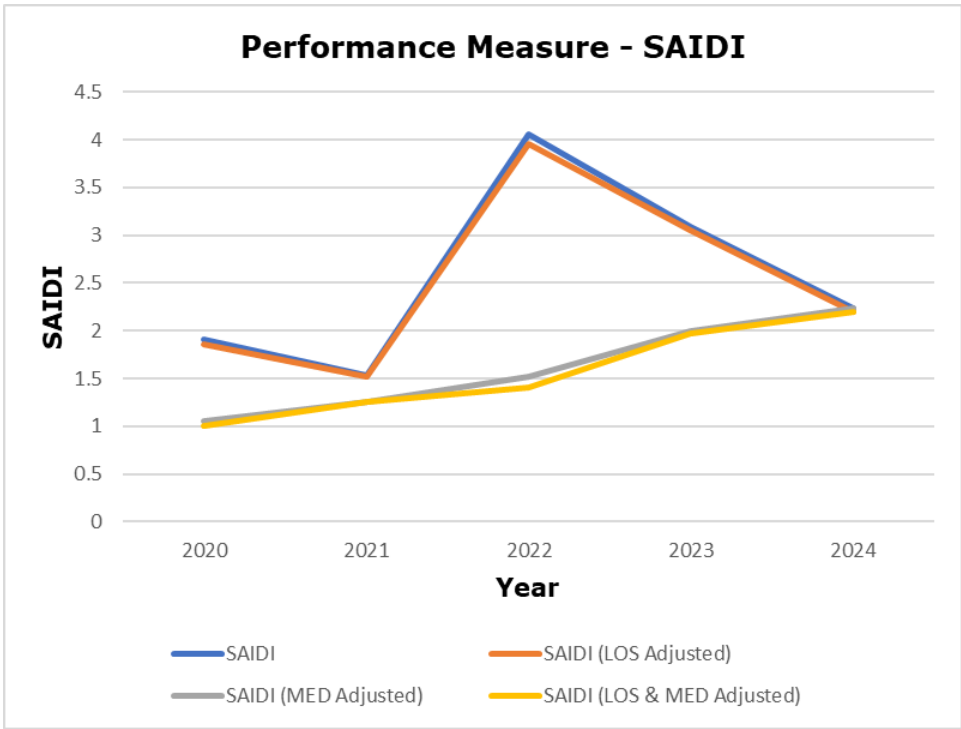


Figure 5.2-3: Performance Measure: SAIFI

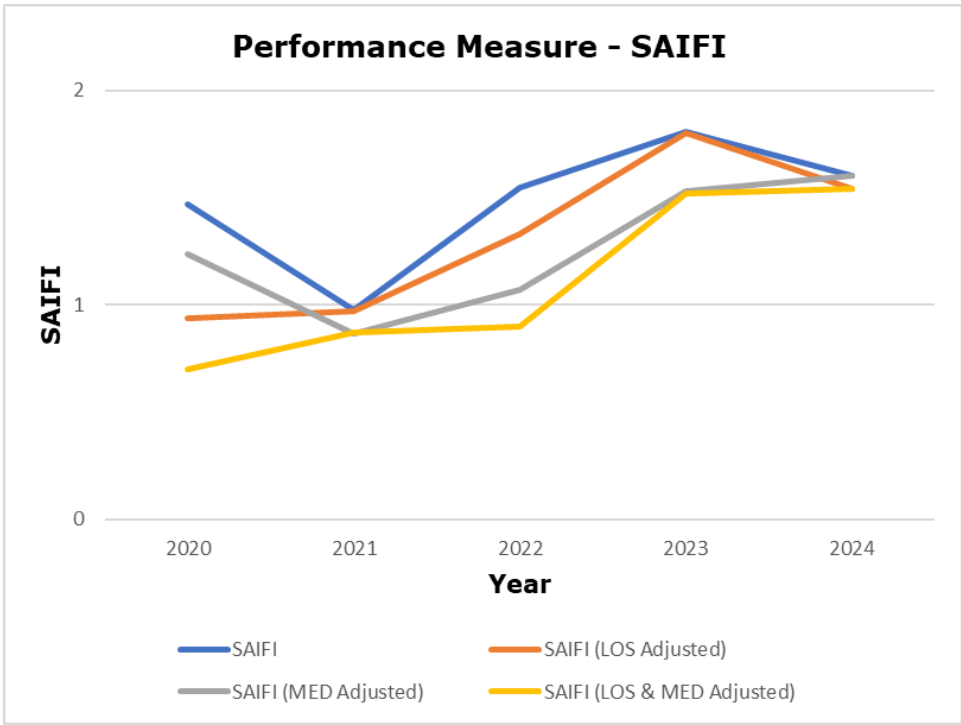


Figure 5.2-4: Performance Measure: CAIDI

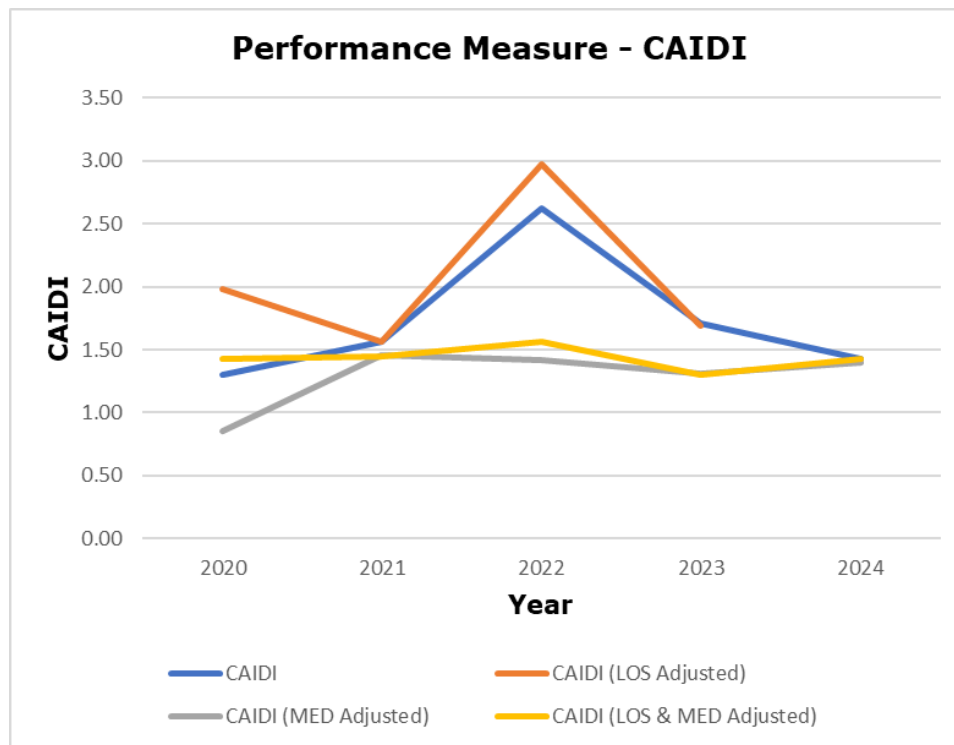


Table 5.2-11 below identifies BHI's reliability performance (MED and LOS adjusted) compared to its target. A summary of BHI's performance for the historical period is provided below.

Table 5.2-11: Historical Reliability Performance vs. Target

Metric	Target	2020	2021	2022	2023	2024	Average
SAIDI	1.19	1.00	1.26	1.41	1.97	2.20	1.57
SAIFI	0.75	0.70	0.87	0.90	1.52	1.54	1.11
CAIDI	1.59	1.43	1.45	1.57	1.30	1.43	1.43

BHI met all of its reliability targets in 2020 and has continued to meet its CAIDI target in every year since. BHI's SAIDI and SAIFI results have deteriorated since 2020, primarily due to:

- Defective Equipment: BHI experienced higher than expected asset failures resulting in increased customer interruptions from 2022-2024, particularly from underground cables and switches. BHI is proposing increased investment in System Renewal programs to address the deteriorating trend in this performance (see Section 5.4.1.2.2).

BHI replaced approximately 17 km of underground cable over the 2021-24 period, most of which were reactive replacements. BHI is proposing increased expenditure levels for this program in order to replace ~26 km of underground primary cables and perform cable rejuvenation on ~50 km of underground primary cables over the 2026 to 2030 period.

- Adverse Weather Events: Although these types of events are outside of BHI's control, it takes steps to proactively address these types of outages as identified below. Over the forecast period, BHI is investing in a number of grid hardening strategies, including reinforcing poles and wires, vegetation management, replacing aging infrastructure, and investing in smart grid technologies such as SCADA reclosers, switches, and sensors, to improve reliability and reduce interruption impacts across the grid during adverse weather events.

BHI continues to take steps to readily identify, troubleshoot and sectionalize problem areas in order to minimize customer impact from interruptions. Ongoing inspection and maintenance of assets also assists BHI with identifying issues to mitigating the risk of asset failure.

5.2.3.2.2 Summary of Major Events

The following tables provide a summary of BHI's MEDs since 2020.

Table 5.2-12: Summary of MEDs since 2020

Year	# of MEDs	Cause of MEDs
2020	3	Adverse weather – wind and thunderstorms
2021	1	Adverse weather – wind
2022	2	Adverse weather – wind and thunderstorms
2023	2	Adverse weather – wind and major structure fire
2024	none	

1

Table 5.2-13: Description of MEDs since 2020

Date	Customer Base Interrupted	Description
March 3, 2020	3,880	Adverse Weather—Wind. High winds caused a large tree limb to come into contact with a primary feeder circuit. The tree limb was too large to be removed by line crews and tree trimmers were needed. Tree trimmers found that the tree was snapped at its base and the entire tree had to be taken down. An upstream switch on same feeder circuit had leads burn off. There was no way to back feed customers until repairs were completed.
July 10, 2020	3,616	Adverse Weather—Wind and Thunderstorms. Severe thunderstorm with high winds caused multiple tree contacts throughout BHI service territory.
July 19, 2020	8,450	Adverse Weather—Wind and Thunderstorms. Severe thunderstorm with high winds caused multiple tree contacts throughout BHI service territory.
December 11, 2021	7,397	Adverse Weather—Wind. There was a windstorm with wind gusts in excess of 100 km/hr. Multiple tree contacts, broken poles, primary conductor, and secondary conductor issues arose as a result of the wind gusts.
May 21, 2022	24,566	Adverse Weather—Wind and Thunderstorms. There was an intense thunderstorm with winds in excess of 140 km/h, which was a derecho storm event.
August 21, 2022	8,902	Adverse Weather—Wind and Thunderstorms. There was a thunderstorm with heavy rain which caused a large tree limb to break, fall on hydro lines, and lockout two 27.6kV feeder circuits. A Hydro One bus protection over tripped and two additional 27.6kV feeder circuits were locked out.
July 27, 2023	10,678	Adverse Weather—Wind. High winds caused large tree limbs from an adjacent property to fall across two feeders in ROW.
August 2, 2023	8,775	Adverse Environment—Major Structure Fire. A major structure fire at a construction site which was in close proximity to a wood pole line with multiple feeders was fully engulfed in flames.

2

3 **5.2.3.2.3 Interruptions by Cause Code**

4 **Interruptions**

5 Table 5.2-14 presents a summary of total interruptions that have occurred within BHI's service
 6 territory, which indicates an increasing trend since 2020. A further breakdown by cause codes is
 7 provided below.

Table 5.2-14: Total Interruptions (2020-2024)

Categorization	2020	2021	2022	2023	2024
All interruptions	451	497	495	588	571
All interruptions excluding LOS	445	495	492	585	566
All interruptions excluding MED	436	485	489	582	571
All interruption excluding MED and LOS	430	483	487	579	566

The trend of total interruptions (excluding MEDs) since 2020 is shown in Figure 5.2-5, varying from a low of 436 in 2020 to a high of 582 in 2023, with the overall trend increasing over the period.

Figure 5.2-5: Number of Interruptions (excl. MEDs)

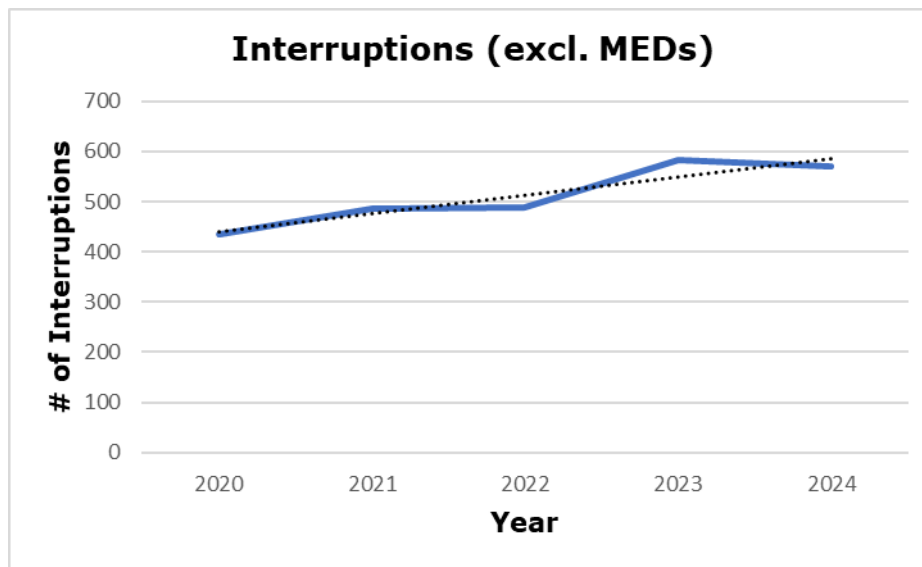


Table 5.2-15 presents total interruptions (excluding MEDs) by cause code since 2020, including the percentage of interruptions attributable to each cause code. Defective equipment, scheduled outages, and foreign interference are the three most common causes of interruptions since 2020. Together, these causes contributed to more than 70% of the total number of interruptions from 2020 to 2024.

Table 5.2-15: Total Interruptions by Cause Code (excl. MEDs)

Cause Code	2020	2021	2022	2023	2024	Total	%
0-Unknown/Other	35	28	24	13	20	120	5%
1-Scheduled Outage	75	125	74	199	192	665	26%
2-Loss of Supply	6	2	2	3	5	18	1%
3-Tree Contacts	53	47	62	80	87	329	13%
4-Lightning	5	11	5	5	0	26	1%
5-Defective Equipment	169	157	160	169	156	811	32%
6-Adverse Weather	34	36	89	28	25	212	8%
7-Adverse Environment	0	0	0	5	4	9	0%
8-Human Element	0	3	5	8	12	28	1%
9-Foreign Interference	59	76	68	72	70	345	13%
Total	436	485	489	582	571	2,563	100%

Defective Equipment is the top contributing cause of BHI's outages, accounting for 32% of the total interruptions since 2020. To mitigate the impact of interruptions caused by Defective Equipment, BHI prioritizes its System Renewal expenditures to target assets most at risk of failure based on their condition. BHI utilizes the ACA and ongoing maintenance and inspection data to assist in prioritizing investments in asset classes. In addition to asset replacement, BHI will continue to conduct inspections and maintenance of assets to identify and address potential issues before they escalate.

Scheduled Outages are the second highest contributing cause of interruptions. These interruptions are due to the disconnection of service to allow BHI to complete capital projects, perform maintenance activities on assets, and conduct line clearing in rear lot areas that require assets to be de-energized for employee and public safety. BHI aims to minimize the impact of scheduled interruptions by limiting the scope of the interruption to the assets that need to be de-energized, back-feeding customers from alternate feeders where possible, and executing work at times that would affect the least number of customers and for periods of shorter duration.

Foreign Interference is the third highest contributing cause of interruptions. These interruptions include wildlife interference, dig-ins, and motor vehicle accidents. BHI aims to minimize these

1 interruptions through initiatives such as public education campaigns to “call before you dig”, and
2 installing animal guards in areas observed to have high wildlife activity.

3
4 Tree contacts are interruptions caused by faults resulting from tree contact with energized
5 circuits. Although tree contacts are generally outside of BHI’s control, BHI will continue to
6 execute on its vegetation management program to mitigate the risk of interruptions caused by
7 tree contacts, in addition to making capital investments in smart switching and ADMS
8 technology to improve system restoration times when interruptions do occur.

9
10 Adverse weather is beyond the control of BHI. However, in alignment with the OEB’s
11 Vulnerability Assessment and System Hardening initiative (“VASH”), BHI will continue to design
12 and invest in storm hardening measures (i.e. physical improvements that can make utility
13 infrastructure more resistant to weather). For example, BHI takes design measures to ensure
14 adequate storm guying and support during asset rebuilds and replacements.

15 Unknown/Other includes interruptions with no apparent cause that contributed to the
16 interruption. Over the forecast period, BHI will continue to analyze system interruptions on a
17 case-by-case basis in order to identify the root cause and develop solutions as appropriate.

18 19 **Customer Interruptions**

20 Table 5.2-16 presents total customer interruptions (“CI”) by cause code since 2020, including
21 the percentage of customer interruptions attributable to each cause code. Performance has
22 been deteriorating since 2021, primarily driven by defective equipment, adverse weather and
23 tree contacts. Together, these causes contributed to over 65% of the total number of customer
24 interruptions from 2020 to 2024.

Table 5.2-16: Customer Interruptions by Cause Code (excl. MEDs)

Cause Code	2020	2021	2022	2023	2024	Total CI	%
0-Unknown/Other	7,011	5,135	965	8,760	10,677	32,548	7%
1-Scheduled Outage	729	2,503	1,670	6,786	4,808	16,496	4%
2-Loss of Supply	36,387	39	11,739	486	4,082	52,733	12%
3-Tree Contacts	10,664	3,536	7,358	35,834	21,331	78,723	18%
4-Lightning	254	2,545	429	330	-	3,558	1%
5-Defective Equipment	22,741	10,494	25,561	25,682	37,204	121,682	28%
6-Adverse Weather	4,326	29,203	17,639	20,317	17,330	88,815	20%
7-Adverse Environment	0	0	0	14	64	78	0%
8-Human Element	0	1,530	292	125	3,474	5,421	1%
9-Foreign Interference	2,260	4,523	8,038	7,374	11,826	34,021	8%
Total	84,372	59,508	73,691	105,708	110,796	434,075	100%

Scheduled outages impact 'total interruptions' more than they impact 'customer interruptions' because BHI aims to minimize the impact of scheduled outages on customers by limiting the scope of the interruption to the assets that need to be de-energized, and back-feeding customers from alternate feeders where possible. In other words, one interruption due to a scheduled outage is less impactful on a per customer basis than other outages because BHI has time to plan and manage the impacts of the outage before it occurs.

Similarly, unexpected interruptions caused by defective equipment, adverse weather and tree contacts can be more impactful on a per customer basis as they are addressed on a reactive basis. BHI's strategies for mitigating interruptions due to defective equipment, adverse weather, and tree contacts are described above in Section 5.2.3.2.3.

Customers Hours of Interruption

Table 5.2-18 presents total customer hours of interruptions ("CHI") by cause code since 2020, including the percentage of customer interruptions attributable to each cause code.

Performance has been deteriorating since 2020, primarily due to defective equipment, tree contacts and adverse weather. Together, these causes contributed to over 75% of the total number of customer hours of interruptions from 2020 to 2024.

Table 5.2-17: Customer Hours of Interruption (excl. MEDs)

Cause Code	2020	2021	2022	2023	2024	Total CHI	%
0-Unknown/Other	5,558	2,932	386	966	732	10,574	2%
1-Scheduled Outage	2,529	8,417	6,550	34,682	17,606	69,784	13%
2-Loss of Supply	3,775	48	7,396	2,357	1,881	15,456	3%
3-Tree Contacts	22,388	6,196	12,427	25,891	47,238	114,139	21%
4-Lightning	39	5,246	70	2,255	-	7,610	1%
5-Defective Equipment	25,733	24,900	44,105	39,881	58,917	193,537	35%
6-Adverse Weather	10,115	32,324	22,246	26,762	17,095	108,541	20%
7-Adverse Environment	-	-	-	89	305	394	0%
8-Human Element	-	661	61	389	409	1,520	0%
9-Foreign Interference	1,785	5,628	11,444	4,837	10,794	34,489	6%
Total	71,923	86,351	104,684	138,110	154,976	556,043	100%

BHI's strategies for mitigating interruptions due to defective equipment, tree contacts and adverse weather are described above in Section 5.2.3.2.3.

5.2.3.3 Distributor Specific Reliability Targets

BHI measures its reliability performance against the SAIDI and SAIFI targets established in the *Report of the OEB: Electricity Distribution System Reliability Measures and Expectations*⁸.

These targets are based on BHI's historical 5-year averages for actual SAIDI and SAIFI performance as reported on its scorecard, and BHI is not proposing to establish performance targets on a different basis.

BHI engages with its customers to determine if their reliability needs and expectations are being met and may pursue targeted reliability improvements for underperforming sections of the system. The results of the Customer Engagement process indicate that customers are in alignment with BHI's strategic priorities for safe, reliable electricity delivery. They are aware of the challenges of maintaining the distribution system in the face of more frequent extreme

⁸ EB-2014-0189, issued August 25, 2015

1 weather events but are not always aware of the cause of interruptions and what is being done to
2 respond to them and expressed a need for better outage communications and notifications
3 systems. BHI plans to address this need through enhanced communication functionality
4 available in its recently implemented OMS, including a new customer-facing outage map.
5 Approximately 84% of customers rate their electricity service as reliable, but nearly all (>90%)
6 customers also recognized the importance of being proactive in replacing infrastructure at risk of
7 failure.

8
9 Based on this feedback, BHI's objectives are to address the declining trend in reliability over the
10 historical period in order to achieve its scorecard targets for SAIDI and SAIFI. BHI will target the
11 declining trend in defective equipment interruptions through increased asset renewal and
12 refurbishment and will target the declining trend in weather related interruptions through
13 continued investment in grid automation and grid hardening.

5.3 Asset Management Process

5.3.1 Planning Process

This section describes BHI's asset management process, including key elements of the process that have informed the preparation of BHI's capital expenditure plan.

BHI's asset management framework sets out the foundation of the DSP and the proposed capital expenditure plan. The asset management framework consists of various processes designed to:

- collect and analyze information on BHI's physical assets, including their current and future operating conditions;
- assess BHI's business priorities and customer-focused goals and objectives in relation to its assets;
- plan, prioritize and optimize expenditures on distribution system-related modifications, renewals, and maintenance, as well as on General Plant facilities and systems.

The main objective of BHI's asset management framework is to minimize the long-term cost of asset ownership, while incorporating customer needs and preferences and adhering to electrical system design standards and other legislative and regulatory requirements.

5.3.1.1 Overview

BHI's asset management objectives are to a large extent driven by the statutory obligations and regulatory obligations found in the *Electricity Act, 1998*, the *Ontario Energy Board Act, 1998* and the OEB's Distribution System Code ("DSC"), including:

- Following good utility practices for system planning to ensure reliability and quality of electricity service on both a short-term and long-term basis;
- "[Ensuring] the adequacy, safety, sustainability and reliability of electricity supply in Ontario through responsible planning and management of electricity resources, supply and demand⁹"; and

⁹ Electricity Act, 1998, S.O. 1998, Chapter 15, Schedule A, p8

- “[Protecting] the interests of consumers with respect to prices and the adequacy, reliability and quality of electricity service¹⁰”.

Beyond its mandated service and compliance obligations, BHI’s asset management process seeks to realize sustainable value from its distribution assets for the benefit of its customers and stakeholders. This requires balancing the needs and preferences of its customers, its distribution system requirements, and relevant public policy objectives to ensure predictable performance and costs over the long-term for both current and future customers.

The asset management objectives also incorporate the OEB’s Renewed Regulatory Framework (“RRF”) outcomes. In particular:

- For Operational Effectiveness, the asset management objectives aim to: (i) construct, maintain and operate all assets in a safe manner and (ii) monitor and address asset condition issues in a timely manner to ensure the continued reliable supply of electricity;
- For Customer Focus, the asset management objectives are designed to ensure that asset management plans align with customer expectations;
- For Public Policy Responsiveness, the asset management objectives are designed to ensure that BHI complies with all legislative and regulatory requirements; and that environmental impacts are considered in the design and management of the distribution system;
- For Financial Performance, the asset management objectives are aimed to manage investment planning to mitigate rate impacts while maintaining corporate financial stability and long-term sustainable performance.

Table 5.3-1 below illustrates how BHI’s asset management objectives align with the Renewed Regulatory Framework for Electricity Distributors (“RRFE”) Performance Outcomes.

¹⁰ Ontario Energy Board Act, 1998, S.O. 1998, Chapter 15, Schedule B, p103

Table 5.3-1: BHI's Asset Management Objectives and Relationship to the RRFE

RRFE Performance Outcome(s)	Asset Management Objective	Definition
Customer Focus	Customer Preference	Ensure the asset management plans are aligned with customer expectations and needs.
Operational Effectiveness	Reliability	Ensure the asset management system provides a sustainable and reliable service to the customers.
	Asset Performance	Ensure the asset management plans reduce poor performing assets and provide the opportunity to modernize the system.
	Operational Efficiency	Ensure the asset management plans provide sustainable cost savings and generate new opportunities for reducing the life cycle costs of operating assets.
Public Policy Responsiveness	Safety	Ensure all the assets are operated, constructed, and maintained in a condition that is safe to all employees, contractors, and the public.
	Environmental Protection	Ensure the impacts of capital investments on sensitive environmental features are minimized.
	Regulatory Compliance	Ensure the asset management plans comply with regulatory and legal requirements.
All	Urgency	Ensure the asset management plans are executed within a timely manner and in accordance/co-ordination with other utilities, regional planning, and third party providers or with internal project dependencies.
	Risk Management	Ensure BHI effectively manages risk – financial, operational, cyber security, regulatory, obsolescence.

5.3.1.2 Important Changes to Asset Management Process since last DSP Filing

There were no significant changes in BHI's asset management process. However, several improvements to make existing processes more efficient and improve the quality of data used for making informed decisions have been implemented since BHI's last DSP filing. The main improvement was addressing data gaps to ensure BHI gathers as much data as possible to allow for a truly data-driven plan. The following are some of the other key improvements in the asset management practices/process that were implemented since the filing of the last DSP:

- Increased engagement with third parties (e.g., ONxpress (a partner of Metrolinx, chosen to deliver the GO expansion as part of Metrolinx's GO expansion program), Halton

1 Region, the City of Burlington and developer groups) to improve forecasting of System
2 Access expenditures during the planning horizon;

- 3 • Implemented more granular tracking of capital expenditures (i.e., proactive vs. reactive)
4 to inform future investment levels as well as monitor impacts of the asset
5 replacement/rehabilitation programs on unplanned capital spends;
- 6 • Added ACA Health Index data into BHI's GIS so Engineering Technicians and field staff
7 can leverage this data to make better informed decisions during the system design
8 phase of capital project planning;
- 9 • Improved tracking of number of units/quantities replaced in certain programs to inform
10 future investment levels as well as unit costs for improved estimation of Capital jobs;
- 11 • More granular reporting of interruption causes, in accordance with the OEB's guidance
12 on sub-cause codes, implemented on Jan 1, 2024, to better identify root cause and
13 remediation measures;
- 14 • Explore cost effective alternatives to like-for-like replacements such as cable injection in
15 place of cable replacement and replacing submersible transformers with above-ground
16 pad-mount transformers; and
- 17 • Updating the inspection parameters used to collect asset specific data from the field to
18 provide a more comprehensive asset condition assessment.

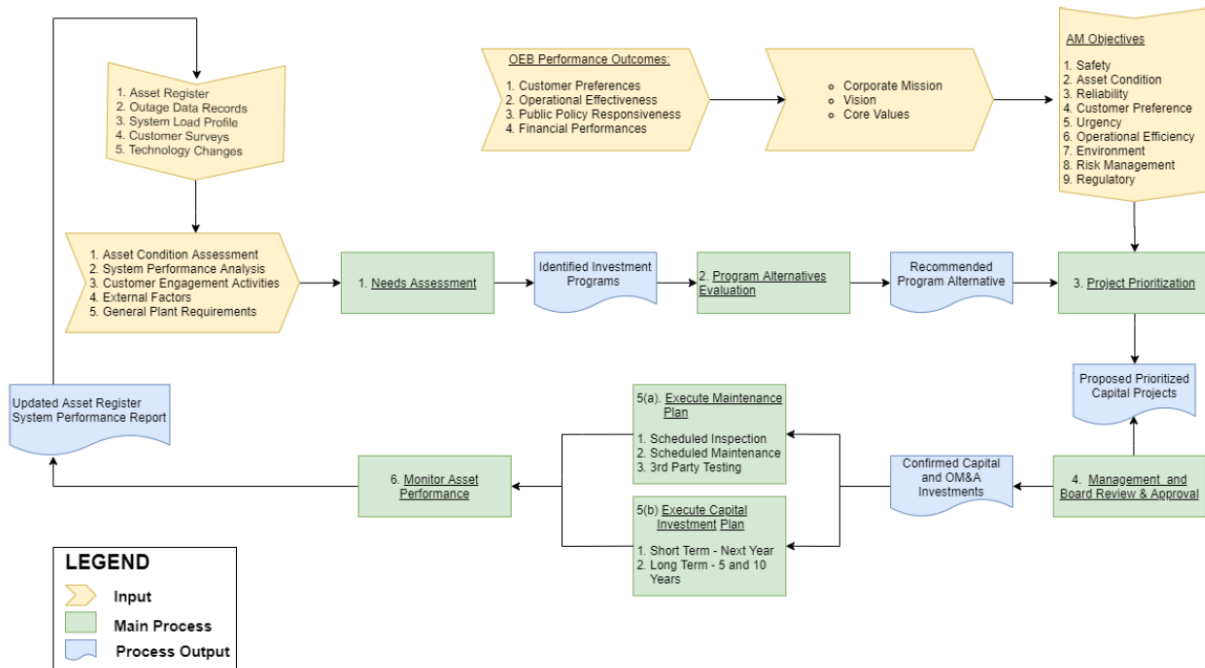
19

20 **5.3.1.3 Process**

21 BHI follows a systematic approach to identify, select, prioritize, and pace investments to ensure
22 it can effectively manage its distribution system while meeting both operational goals and
23 customers' needs. BHI's asset management process consists of the following main
24 components, further illustrated in Figure 5.3-1 below:

- 25 1. Needs Assessment
- 26 2. Program Alternatives Evaluation
- 27 3. Project Prioritization
- 28 4. Management and Board Review and Approval
- 29 5. Work Execution
- 30 6. Monitor Asset Performance

Figure 5.3-1: Asset Management Process



5.3.1.3.1 Needs Assessment

The asset management process begins with the identification of investment needs. Inputs into this process include asset performance information incorporating the previous investment cycle, the updated asset register, customer engagement, system loading and configuration data, interruption records and technology changes.

The following considerations support the needs assessment process:

1. Asset Condition Assessment
2. System Performance Analysis
3. Customer Engagement (including Application-Specific Customer Engagement Phase I)
4. External Factors
5. General Plant Requirements

Further details are provided in Section 5.3.1.4.

Following the needs assessment, investments are categorized, pursuant to the DSP Filing Requirements, into the following four investment categories:

- 1 • **System Access** includes mandatory investments based on the utility's obligation to
2 accommodate customer connections and comply with other mandated service
3 requirements. These are mandatory expenditures and may include new or modified
4 customer service connections, road authority required plant relocation projects, or other
5 mandated service obligations.
- 6 • **System Renewal** includes investments to replace or refurbish assets to extend their
7 original service life in order to maintain the ability of the distribution system to provide
8 customers with electricity services.
- 9 • **System Service** includes investments to modify the distribution system to meet
10 operational objectives and anticipated future customer electricity service requirements.
- 11 • **General Plant** includes investments to modify, replace or add non-distribution assets to
12 support the utility's ongoing operations (e.g., facilities, fleet, information technology, etc.).

13
14 A brief overview of the drivers associated with these investment categories is provided in
15 Section 5.2.1.2 of this DSP.

16
17 The outcome of the needs assessment process is a list of mandatory and non-mandatory
18 investment programs. Mandatory investments are automatically included in the capital
19 expenditure plan for a given year. Non-mandatory investments are evaluated further as part of
20 the program alternatives evaluation step, which includes the development and assessment of
21 potential alternatives.

22 23 **5.3.1.3.2 Program Alternatives Evaluation**

24 **Developing Alternatives**

25 BHI takes into account a number of considerations when developing alternatives, including
26 safety, the results of the needs assessment, customer needs and preferences, resource
27 availability and cost benefit analysis. BHI planners identify program alternatives which represent
28 a different level of investment and pacing (typically slower pacing, status quo (i.e., investment
29 level remains consistent with historical pacing) or accelerated pacing). Alternatives range from
30 “do nothing”, to partial need fulfillment, to full need fulfillment, as well as options for repair or
31 refurbishment versus replacement.

Assessing NWS

BHI has considered the applicability of non-wires solutions (NWS) for specific projects exceeding the OEB's \$2 million threshold, as described in section 5.3.5.

Customer Engagement (Phase II)

BHI initiated the second phase of its customer engagement process following the development of a draft business plan. Phase II emphasized understanding customer preferences regarding specific outcomes, such as the importance and appropriateness of proposed investment levels. During this phase, BHI sought customer inputs to (i) validate the needs, values, and priorities identified during Phase I and (ii) gather feedback on draft capital investment plan, including associated impacts on electricity bills. Further details on the methodology and outcomes of Phase II are provided in Section 5.2.2.1 of this DSP.

Program Evaluation

BHI evaluates alternatives for non-mandatory capital programs over \$240,000 based on the OEB's materiality guidance in addition to other factors including the expected number of avoided interruptions, criticality of the asset to system performance, customer feedback, environmental factors, safety, security, and cost. The use of these project attributes and outcomes ensures alignment with BHI's asset management objectives.

5.3.1.3.3 Project Prioritization

The next step in the asset management process is prioritizing the recommended investments based on their contribution to BHI's asset management objectives. At this stage, BHI breaks down its larger capital programs into specific projects for inclusion in the Prioritization Tool. Assessing and prioritizing capital expenditures at a more granular level facilitates the optimization of BHI's capital expenditures.

Project Prioritization Tool

BHI uses its Prioritization Tool to standardize risk assessment across a range of projects, providing an objectives-based ranking of each project's contribution to BHI's asset management objectives.

Project planners choose from a standardized list of impact and probability outcomes for each of the asset management objectives listed in Table 5.3-1 to determine a score for each project. Based on the choices, each investment receives an overall score indicating its contribution to the achievement of BHI's asset management objectives, which BHI uses to rank each project in order of need and value. In addition, the tool allows for mandatory projects to be flagged for automatic inclusion in the budget. Mandatory projects are prioritized first; however, each of them still receives an overall score for comparability purposes.

The outcome of this step is a prioritized list of projects based on the scores generated in the project prioritization tool. Results for the 2026 Test Year are provided in Table 5.4-15.

5.3.1.3.4 Management and Board Review and Approval

BHI management is engaged throughout the asset management process including reviewing and providing feedback on the results of the program alternatives evaluation and project prioritization. A proposed capital budget by project is determined by BHI management taking into account capital expenditure and depreciation levels, pacing of investments, cash flow and borrowing requirements. The outcome of this step is a list of confirmed capital projects that is used to (i) determine a one-year capital budget by project; and a five-year capital expenditure plan by program and investment category; and (ii) inform the development of BHI's maintenance plans. The capital plan and operating expenditures are finalized after review and approval by BHI's Board of Directors.

5.3.1.3.5 Execute Plans

Capital Plans

Once the capital budget and five-year plan have been approved, BHI executes its one-year capital budget. If resources must be allocated to emergency or unplanned investments resulting in other investments being deferred, efforts are made to defer the lowest priority investments where possible.

BHI executes its capital project design and construction through a combination of internal and external resources.

Maintenance Plans

BHI has established a comprehensive system of inspection and performance reporting procedures to provide for continuous assessments of its distribution. These procedures are focused on continuous performance improvements to ensure effective and successful management of BHI's distribution system assets. BHI's maintenance plan is consistent with good utility practices and is prepared annually.

The following items are included within the plan:

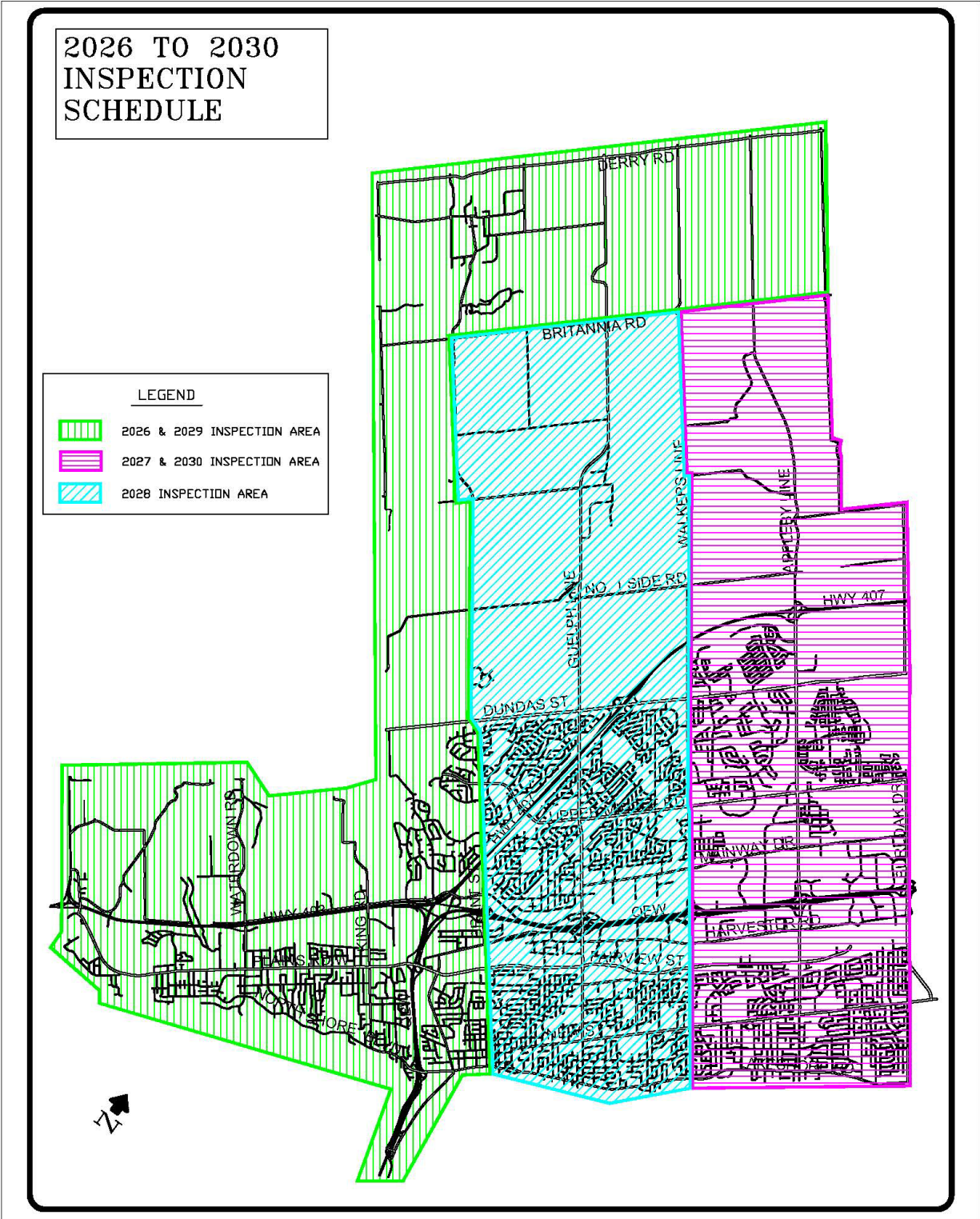
- Wood pole testing;
- Insulator washing;
- Infrared thermography of the overhead system, switching cubicles and MSs;
- Inspection and cleaning of switching cubicles (i.e., dry-ice cleaning);
- Vegetation management;
- Submersible transformer inspection;
- Pad-mounted/pole-mounted transformers inspections;
- Primary switch maintenance;
- Cable testing; and
- Substation maintenance program (e.g. DGA for transformers, breakers and relays maintenance).

For ease of administration, these activities are organized geographically and carried out at a cadence based on specific needs and minimum inspection requirements in accordance with Appendix C of the DSC and Ontario Regulation 22/04. BHI's inspection practices are audited annually in accordance with Ontario Regulation 22/04.

BHI has subdivided its service territory into three zones for inspection and maintenance purposes, as identified in Figure 5.3-2. The zones are subdivided into grids of assets for inspection purposes. Each zone is inspected on a three-year cycle.

1

Figure 5.3-2: Inspection Areas Established by BHI by Year (2026 – 2030)



2

1 Inspections on overhead and underground assets in each area are performed using defined
2 asset inspection checklists. Inspection findings are collected, consolidated, summarized, and
3 reported for each area using an electronic inspection collection tool.

4
5 Follow-up work orders resulting from maintenance activities are prioritized based on urgency.
6 Any recommendations required to be implemented within a one-year period are included in the
7 Annual System Performance Report.

9 **5.3.1.3.6 Monitor Asset Performance**

10 Asset information is updated to reflect changes resulting from the execution of annual
11 maintenance and capital programs. BHI prepares an Annual System Performance Report to
12 review the system performance for the previous year, which is an input into the needs
13 assessment the following year. The following attributes are reviewed and addressed in the
14 Annual System Performance Report:

16 **MS and Feeder Performance at Primary Voltage Levels**

17 The analysis of feeder performance is based on the recording of feeder auto-recloses and
18 lockouts and the causes of customer interruptions.

20 **Underground Distribution**

21 BHI closely monitors the performance of underground cables on a geographic and individual
22 feeder basis. Primary cable failures within the distribution system are reported as part of the
23 Annual System Performance Report. In addition, BHI utilizes an advanced, non-degrading,
24 cable testing method to assess the robustness of older cables. The observations inform specific
25 recommendations for future cable replacements or rejuvenation.

27 **System Demand and Critical Loading Issues**

28 The primary supply voltage available from the five HONI owned transformer stations supplying
29 electricity to the City of Burlington is at 27.6kV. A summary of the overall measured coincident
30 peak demand and percentage growth for the past ten years is included in the report, as well as

the annual 27.6-kV feeder peaks during the non-coincident peak load. These inputs inform future maintenance and operations recommendations for BHI's 27.6-kV feeders.

System Maintenance Activities and Priorities

The Annual System Performance Report summarizes the annual system maintenance activities and their outcomes. The outcomes inform future maintenance and operations recommendations.

Reliability Statistics and Observations

The Annual System Performance Report provides annual records for four service reliability indices – SAIDI, SAIFI, CAIDI, and SAARI – that provide BHI with an annual measure of its service performance.

The report provides future recommendations for Operating and Maintenance (“O&M”) activities and capital investment based on analyses and observations.

BHI's Engineering Department is responsible for ensuring that consistent and accurate records are maintained and that BHI's GIS records are kept current.

5.3.1.4 Data

BHI uses several datasets and inputs to assess the status of its distribution system assets and assist in determining the capital and operational investments required. This includes the ACA, customer engagement results, inspection and maintenance results, asset management objectives, the OEB's performance outcomes and any external factors. Some of the key elements are explained in further detail below.

Inspection and Maintenance

As part of BHI's regular maintenance and inspection practices, inspection, maintenance, and operational data are collected, stored, and disseminated. This data is regularly updated and is used to support BHI's operating and capital expenditure plans. Further information on BHI's maintenance and inspection practices provided in Section 5.3.3.2 of this DSP.

Asset Condition Assessment (ACA)

An ACA is the process of analyzing the condition and performance of an asset and its individual components using multiple data sources, to assess its overall health. ACAs leverage asset demographic data, inspection records and test results. Computational models are applied to this input data to determine an asset's Health Index (HI). The advantage of an evidence-based HI is the ability to determine asset condition using a practical, objective and uniform analytical method. A standardized model ensures that the applicable assets are assessed in a consistent manner to inform asset management strategies and policies.

In 2024, BHI completed an ACA for its major distribution assets, attached as Appendix I to this DSP. Each asset class was analyzed using a specific HI model, based on weighted inputs that quantify asset condition in a consistent manner. The number and type of inputs vary by asset class and were determined by available data and industry guidelines. BHI utilizes ACA results to identify and prioritize assets most at risk of failure as part of its needs assessment process. More details on the 2024 ACA and its results are described in Section 5.3.2.2.2 and Appendix I.

System Performance Analysis

BHI undertakes an annual comprehensive analysis of the performance of its distribution system to identify system performance issues and risks, and to assess short-term and long-term system capacity. The 2023 Annual System Performance Report is attached as Appendix J, and includes the following:

- **Feeder and MS Performance Analysis:** Includes details on the performance of BHI's MSs and distribution feeders at all primary voltage levels. Feeder performance details include the history of auto-recloses and lockouts for the past ten years. BHI identifies all feeders experiencing either five or more auto-recloses or two or more lockouts during the last year. and summarizes the causes of the performance issues. MS capacities and peak loadings are reviewed to identify any weaknesses in MS and feeder back-ups. In addition, maintenance activities and priorities are reviewed in detail to identify issues requiring renewed or accelerated attention. BHI uses the CHI and CI metrics to identify feeders that contribute negatively to reliability. The assessment of system reliability assists BHI in identifying investment needs.

- **System Risk Analysis:** Includes the monitoring and analysis of reliability indices (e.g., SAIDI, SAIFI and System Average Auto Reclose Index (“SAARI”) with recommendations on maintenance and capital expenditures based on the performance of individual feeders. The number and duration of customer interruptions along with the ACA inform the timing of investment needs.
- **System Demand/Loading:** BHI’s real-time SCADA system provides continuous data about the status, performance, and loadings of all MSs and distribution feeders. The data is utilized to develop the Annual System Performance Report, which identifies system demand and loading issues, and potential investment requirements to address them.

Customer Engagement Activities

BHI interacts with customers through various channels to identify and inform its plans to ensure continuous improvement of its customer services, as well as the development of its capital programs and execution of capital work. BHI has connected with customers through web-based services, mobile device options, surveys, or by employing social media platforms, such as “X” (formerly Twitter), Facebook and Instagram. A Customer Satisfaction Survey is conducted annually to help identify customer preferences and attitudes about the company.

BHI conducted application-specific customer engagement to support its Application with the goal of conducting customer engagement activities that would be used to inform the content and priorities for this DSP. Further details are provided in Section 5.2.2.1 of this DSP.

External Factors

External factors relate to BHI’s legislative and regulatory obligations towards customers, the public and other external stakeholders (e.g., the City of Burlington, Halton Region, the Ministry of Transportation (“MTO”), the Electrical Safety Authority (“ESA”), and Metrolinx). External factors can give rise to mandatory investments, such as those to accommodate externally driven projects, meet customer service obligations, align with regional planning needs, or ensure environmental and public safety.

BHI regularly engages with developers and builders in a variety of ways to receive input relevant to its short-term and long-term planning of local and regional distribution-related infrastructure. These ongoing consultations assist BHI in identifying and planning for new distribution system capacity and connection needs. BHI regularly consults with the City of Burlington, Halton Region, and other utilities for the purposes of informing its distribution system planning processes. This includes gaining important insights into planned capital work and identifying coordination opportunities for upcoming projects, road widening or water main expansions. BHI is a regular participant at regional planning meetings with HONI Transmission, the IESO and other LDCs to develop an electricity infrastructure plan to address electrical supply needs. Further details on BHI's efforts relating to coordinated planning with third parties are provided in Section 5.2.2 of this DSP.

General Plant Requirements

General Plant investments are pivotal to successfully run the business and continue to provide customers with reliable, efficient, and safe distribution service. Investments in buildings, tools, and equipment, rolling stock, and electronic devices and software are required to support day-to-day business and operational activities. General Plant investment needs are identified through ongoing maintenance programs, audits, third-party assessments, and compliance with legislative or regulatory requirements. Some of these investments include building repairs, replacement of aging fleet, IT/OT (e.g. SCADA upgrades and investment in an ADMS), and cybersecurity.

5.3.2 Overview of Assets Managed

5.3.2.1 Description of Service Area

5.3.2.1.1 Overview of Service Area

BHI is an LDC serving approximately 69,000 residential and commercial customers in the City of Burlington. It operates under OEB distribution licence ED-2003-0004 and maintains 32 MSs and approximately 1,516 kilometers of distribution lines throughout its service area. BHI is

wholly owned by the City of Burlington and the boundaries of the service area are set out as follows:

- West:
 - Hwy. 6 (North Shore Blvd. to Old York Rd.)
 - Snake Rd. (Old York Rd. to Main St. S.)
 - Mountainbrow Rd. to Kerns Rd.
 - Kerns Rd. / Parkside Dr. / Millborough Townline (Mountainbrow Rd. to Derry Rd.)
- North:
 - Plains Rd. to Snake Rd. to Mountainbrow Rd. to King Rd. ending at Kerns Rd.
 - Derry Rd. (Millborough Townline to Bell School Line)
 - 1 Side Rd. (Bell School Line to Tremaine Rd.)
- East:
 - Bell School Line (Derry Rd. to 1 Side Rd.)
 - Tremaine Rd. / Burloak Dr. (1 Side Rd. to Lakeshore Rd.)
- South:
 - The shore of Lake Ontario

BHI's total service area is 188 square km, of which 90 square km are rural and the remainder is urban. Geographically, Burlington is located in Halton Region between the north shore of Lake Ontario and the Niagara Escarpment. Economically, Burlington is located near the geographic center of the Golden Horseshoe, a densely populated and industrialized region home to over 7.7 million people. Part of the surrounding semi-rural area is included in Ontario's Greenbelt Plan Area.

BHI is responsible for providing all regulated distribution services within its service area. Its distribution system has an almost even split of overhead to underground infrastructure, with 56% of its service area served by overhead infrastructure and 44% served by underground infrastructure.

1 BHI does not have any other LDCs embedded within its distribution system, and it is not a host
2 utility to other distributors. BHI's neighbouring electricity distribution utilities are:

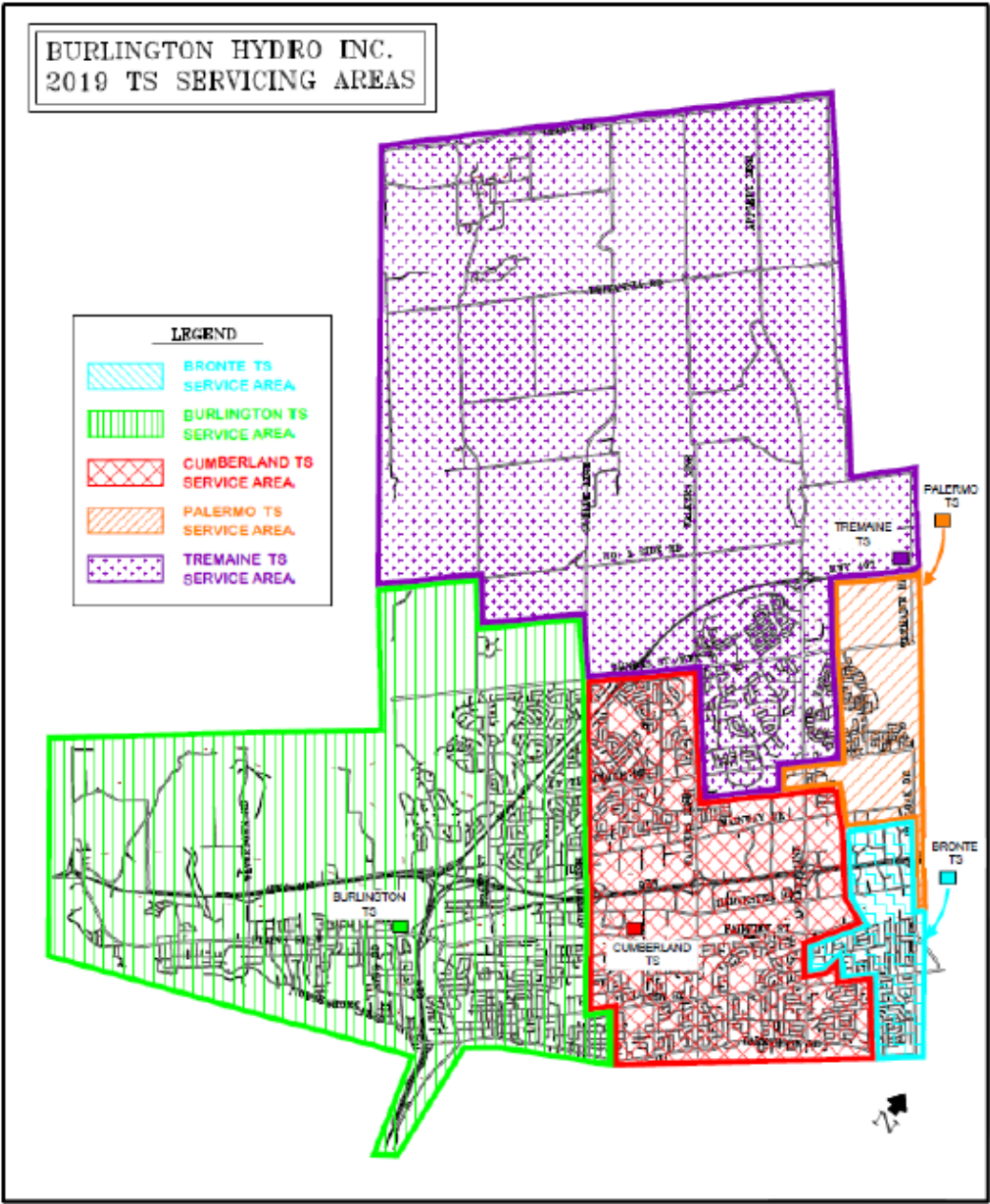
- 3 • Alectra Utilities to the West;
- 4 • Milton Hydro to the North;
- 5 • HONI to the Northeast; and
- 6 • Oakville Hydro to the East.

7
8 The system is supplied by HONI from five TSs, namely Burlington TS, Cumberland TS, Bronte
9 TS, Palermo TS, and Tremaine TS. The boxes in Figure 5.3-3 depict the geographical locations
10 of the TSs and the shaded areas indicate the service region that is served by of the TSs within
11 BHI's service area. All TSs are owned and operated by HONI, up to and including the feeder
12 breakers. BHI does not own or operate assets that operate at voltages greater than 50 kV. BHI
13 owns 34 distribution feeders egressing from the TS, all of which operate at 27.6 kV. Distribution
14 transformers on the 27.6kV system supply customers directly.

15
16 There is a high potential for the development of renewable generation in BHI's service area.
17 Rooftop solar units could be installed on some of the many roofs in the downtown core and
18 surrounding suburbs. In addition, the area in the northwest of the City is predominantly rural
19 land, suitable for ground mount solar installations. BHI uses its GIS software to identify the
20 actual location on the distribution grid of all existing generators as well as the probable
21 connection points and feeders for all proposed projects that are known to BHI.

1

Figure 5.3-3: HONI Transformer Stations Serving BHI Service Area



2

5.3.2.1.2 Customers Served

Table 5.3-2 below depicts the number of customers that BHI serves. The table illustrates a slight increasing trend in BHI'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. BHI experienced a 0.4% compound annual growth rate in its customer base from 2019 to 2024.

Table 5.3-2: Customers Served

Annual Year	Residential	General Service <50 kW	General Service ≥50kW	Total
2024	62,651	5,951	959	69,561
2023	62,297	5,903	971	69,171
2022	62,027	5,909	943	68,879
2021	61,915	5,842	985	68,742
2020	61,803	5,776	989	68,568
2019	61,502	5,681	1,022	68,205

5.3.2.1.3 System Demand & Efficiency

Table 5.3-3 shows the annual season and average peak demand in kW for BHI's distribution system. BHI experiences a system peak during the summer months.

Table 5.3-3: Peak System Demand Statistics

Annual Year	Winter Peak (kW)	Summer Peak (kW)	Average Peak (kW)
2024	237,875	340,324	289,099
2023	230,530	337,382	283,956
2022	243,767	344,274	294,021
2021	240,953	344,874	292,914
2020	239,382	349,699	294,541
2019	254,538	323,155	288,847

Table 5.3-4 indicates the efficiency of the kilowatt-hour purchased by BHI and delivered. Historical losses as a percentage of purchased energy have been at or below 4.2%.

Table 5.3-4: Efficiency of kWh Purchased by BHI

Annual Year	Total kWh Delivered (excluding losses)	Total kWh Purchased	Losses as % of Purchased
2024	1,511,587,889	1,575,148,845	4.0%
2023	1,484,415,329	1,547,138,781	4.1%
2022	1,531,698,249	1,591,919,438	3.8%
2021	1,513,843,506	1,580,129,802	4.2%
2020	1,504,792,712	1,570,714,907	4.2%
2019	1,530,473,908	1,595,966,604	4.1%

5.3.2.1.4 Summary of System Configuration

BHI does not own any TSs, and instead receives power at 27.6 kV from HONI, as described above in section 5.3.2.1.1. HONI identifies the Capacity Allocated to Customers (“CATC”) for each of its TSs in Table 5.3-5.

Table 5.3-5: Capacity Allocated to Customers for each Transformer Station

HONI TS	CATC (MW)
Cumberland TS	148
Bronte TS	30
Palermo TS	31
Burlington TS	156
Tremaine TS	115
Total	480

BHI owns 34 distribution feeders egressing from these TSs, all of which operate at 27.6kV. MSs on the 27.6kV system step the voltage down to 13.8kV and 4.16kV. BHI’s 32 MSs contain a combined 44 MS transformers. Out of the 44 MS transformers, 14 are rated for 13.8 kV on the secondary side supplying 26 feeders, and 30 are rated for 4.16 kV on the secondary side supplying 98 feeders. BHI does not own any embedded feeders but leases two dedicated

feeders coming from Bronte TS. Table 5.3-6 below shows the number of feeders and length at each voltage class.

Table 5.3-6: Number and Length of Lines based on the Voltage Class

Voltage (kV)	Feeder Count	Feeder Length (km)
4.16	98	207
13.8	28	191
27.6	34	351

BHI's system consists of approximately 56% overhead system and 44% underground system. Table 5.3-7 shows the line length for overhead and underground cables categorized by single phase and three-phase circuits.

Table 5.3-7: Length of Lines based on the System Class

System Class	1-phase (km)	3-phase (km)
Underground	514	172
Overhead	254	576

Table 5.3-8 identifies the MS transformers owned by BHI and their rated capacity.

Table 5.3-8: MS Transformers and Capacity

MS Designation	Transformer Bank	Capacity (MVA)	Secondary Voltage (kV)
Appleby	T1	6	4.16
	T2	10	4.16
Brant	T1	5/6.6	4.16
Bridgeview	T1	5/5.6	4.16
Drury	T1	6/8/10	4.16
Easterbrook	T1	6/8	4.16
Elgin	T1	6/6.75	4.16
Elizabeth Gardens	T1	5/6.6	4.16
Fairleigh	T1	5/6.6	4.16
Fairwood	T1	6	4.16
	T2	6	4.16

MS Designation	Transformer Bank	Capacity (MVA)	Secondary Voltage (kV)
Grahams	T1	5/6/8	4.16
Hampton	T1	6/8/10	4.16
	T2	6/8/10	4.16
Harvester	T1	6/8/10	4.16
Howard	T1	5	4.16
Maple	T1	10/16	4.16
	T2	10/16	4.16
Marley	T1	5/7.2	4.16
Martha	T1	10	4.16
	T2	10	4.16
Mount Forest	T1	7.5/9.5/11.9	4.16
Partridge	T1	5/6.6	4.16
Pinecove	T1	6/7.5	4.16
Pinedale	T1	5.6/7.5	4.16
Port Nelson	T1	6/7.5	4.16
Spruce	T1	6/8/10	4.16
Walkers	T1	6/8/10	4.16
Woodward	T1	6	4.16
	T2	6	4.16
Fairview	T1	10/12.5	13.8
	T2	10/12.5	13.8
Interchange	T1	10/13.3/16.6	13.8
Lowville	T1	10/13.3/16.6	13.8
	T2	10/13/16	13.8
Orchard	T1	10/13/16	13.8
Palmer	T1	10/13/16	13.8
	T2	10/13/16	13.8
Reservoir	T1	15/20/25	13.8
	T2	15/20/25	13.8
Towerline	T1	15/20/25	13.8
	T2	15/20/25	13.8
Tyandaga	T1	10/12.5	13.8
	T2	12/15	13.8

5.3.2.1.5 Climate

The main urban area of BHI is south of the Parkway Belt and Highway 407. The land north of Highway 407 (and north Aldershot) is used primarily for agriculture, rural residential, and conservation purposes. The City of Burlington is comprised of the Niagara Escarpment and the sloping plain between the escarpment and Lake Ontario. Burlington has a humid continental climate with four distinct seasons over which the temperature fluctuates greatly from mid-summer to mid-winter. The climate is greatly affected by Lake Ontario, resulting in cold winters, and noticeable variability in the weather over short distances. Such close proximity to Lake Ontario also results in high offshore wind speeds which frequently results in widespread damage to trees and power lines near the lake. As indicated in Table 5.2-11 above, the majority of MEDs experienced by BHI are due to severe windstorms.

Recognizing the severity of a changing climate, Burlington City Council declared a climate emergency in 2019 and a year later approved a Climate Action Plan with a target to become a net carbon zero community by 2050.

Burlington is expected to see more days above 30°C, increasing from an estimated 29 days in 2020 to 48 days in 2050, accompanied by an increased number and length of heat waves¹¹. Cold days are expected to steadily decrease over time and the mean temperature is expected to increase. Total annual precipitation is expected to increase slightly, but the region will see more days with heavy precipitation (20 mm or more), increasing from 7 days a year in 2020, to 9 days a year by 2050. This precipitation will also shift to more freezing rain and ice in winter. The frost-free season will expand, which will (i) extend the growing season (impacting BHI's vegetation management program), (ii) impact the success rate of pests and invasive species management, and (iii) result in changes to precipitation patterns which can change crop planting patterns and crop success. More frequent higher intensity storms are expected, which will increase stress and wear on current infrastructure which was not designed to withstand more frequent and severe weather events.

¹¹ City of Burlington Climate Action Plan, pg. 16, April 2020

5.3.2.1.6 Economic Growth

As the City of Burlington continues to grow, their Vision 2040 Strategic Plan, attached as Appendix K to this DSP, addresses the need for a strategic response to emerging economic and demographic changes, and aims for the creation of 1,000 new jobs every year over the planning horizon. The City of Burlington is in its next phase of city-building as it focuses on area-specific plans (“ASPs”) for the Aldershot GO, Burlington GO and Appleby GO MTSA as intensification hubs for future population growth. In addition to the City of Burlington’s GO Stations, the 2024 City’s Official Plan for growth and development focuses on building of intensification areas in the Downtown, the Uptown Urban Centre, Mixed Use Nodes, and Intensification Corridors around the major highways (403 and 407) and other key locations. Burlington’s rural area is envisioned as an economically and socially active area, producing agricultural products and providing rural recreational activities for the city. There is, therefore, a need to invest in the electrical infrastructure through expansion of the distribution system to bring capacity to the above growth intensification neighbourhoods in the City.

Burlington’s Housing Strategy was approved by Council in June 2022. This strategy creates a road map and acts as a guiding document for housing needs in the City of Burlington in support of the Province’s More Homes Built Faster Act (“MHBFA”) of 2022. Based on Halton Region’s planning estimates, Burlington’s population and number of residential units are expected to grow by 25% by 31% respectively over the next 20 years¹² which will result in increased demand for energy. Overall, summer peak electricity demand is expected to grow from approximately 337MW in 2023 to 438MW by 2050, while winter peak electricity demand is projected to increase from approximately 231MW in 2023 to 512MW in 2050¹³. Burlington is serviced by five HONI owned TSs with a combined allocated capacity of 478MW, of which ~140MW is available to support the new developments described above. As the population increases, BHI must ensure that its grid infrastructure is scaled to meet customers’ electricity

¹² Halton Region. (February 2022). Land Needs Assessment. <https://www.halton.ca/getmedia/c4bc5320-ca9a-42c0-9d78-50e73d6ad504/LPSROPR-PGC-Report-Appendix-A-Land-Needs-Assessment.aspx>

¹³ Burlington Distribution System Sustainability Plan, <https://www.burlingtonhydro.com/images/pdfs/BEC-Sustainability-Plan-Final-Jun-19-2024.pdf>, p5

demands. In addition to population growth, increased electrification and climate change impacts will drive increased demand.

5.3.2.2 Asset Information

BHI provides information on the age distribution by asset type in Table 5.3-9 below. The majority of asset classes exhibit an older age distribution, which is to be expected of a mature utility but requires regular asset inspection, maintenance, and renewal to mitigate the increased risk of failure.

1

Table 5.3-9: Age Distribution by Asset Class

Asset Category	Population	Age Distribution (%)						
		0-10	11-20	21-30	31-40	41-50	51-60	60+
Wood Pole	15,038	11%	14%	12%	14%	16%	13%	21%
Concrete Pole	227	8%	13%	60%	5%	11%	3%	0%
Steel Pole	26	8%	8%	4%	20%	28%	32%	0%
Overhead Primary Conductors (km)	830	7%	16%	0%	14%	13%	39%	11%
Underground Primary Cables (km)	686	4%	15%	0%	17%	25%	33%	6%
Pole-mount Transformer	3,179	13%	20%	17%	17%	16%	12%	5%
Pad-mount Transformer	4,066	11%	24%	32%	27%	6%	1%	0%
Submersible Transformer	768	15%	21%	28%	6%	12%	18%	0%
Vault Transformer	66	6%	21%	17%	17%	21%	18%	0%
Distribution Switchgear	239	21%	16%	15%	39%	8%	0%	0%
Overhead Switch	4,049	16%	11%	4%	12%	13%	34%	10%
IntelliRupter Reclosers	14	14%	86%	0%	0%	0%	0%	0%
SCADAmate Switches	71	18%	46%	32%	3%	0%	0%	0%
Station Power Transformer	44	23%	7%	5%	16%	25%	20%	5%
Circuit Breaker	132	8%	12%	2%	24%	25%	29%	0%
Station Switchgear	44	16%	5%	11%	14%	30%	23%	2%
Feeder Egress Cable (km)	23	14%	9%	6%	8%	30%	31%	2%
Battery Bank	32	94%	3%	3%	0%	0%	0%	0%
Charger	32	38%	22%	31%	9%	0%	0%	0%
Protection Relay	127	15%	19%	23%	22%	16%	6%	0%
Building	32	0%	0%	0%	19%	25%	47%	9%

2

5.3.2.2.1 Asset Capacity & Utilization

System utilization is assessed based on the peak load of each feeder and station transformer, relative to their respective ratings. Feeders are typically rated at the calculated ampacity. Station transformers are typically rated based on their rated nameplate capacity.

Station Capacity

For stations with two transformers, each transformer is ideally loaded at 50% of the rated capacity, such that the transformers can provide back-up to one another. Similarly, stations with one transformer are typically loaded at 50-70% of the rated capacity, such that if another station requires back-up, there is enough capacity available.

Table 5.3-10 identifies the transformer peak loading for all MSs and their utilization in 2023 (2024 data was not available at the time of filing this DSP).

Table 5.3-10: BHI 2023 Station Transformer Utilization

MS	Transformer	Base Rating (kVA)	Maximum Emergency Rating (kVA)	2023 Peak Loading (kVA)	2023 % Utilization
4.16 kV					
Appleby	T1	6,000	6,000	3333	55.55%
	T2	10,000	10,000	3765	37.65%
Brant	T1	5,000	6,600	4328	86.56%
Bridgeview	T1	5,000	5,600	1678	33.56%
Drury	T1	6,000	10,000	3680	61.33%
Easterbrook	T1	6,000	8,000	4123	68.72%
Elgin	T1	6,000	6,750	2725	45.42%
Elizabeth Gardens	T1	5,000	6,600	3419	68.38%
Fairleigh	T1	5,000	6,600	2736	54.72%
Fairwood	T1	6,000	6,000	1570	26.17%
	T2	6,000	6,000	3416	56.93%
Grahams	T1	5,000	6,600	3026	60.52%
Hampton	T1	6,000	10,000	3721	62.02%
	T2	6,000	10,000	2857	47.62%
Harvester	T1	6,000	10,000	4390	73.17%
Howard	T1	5,000	5,000	769	15.38%
Maple	T1	10,000	16,000	4231	42.31%

MS	Transformer	Base Rating (kVA)	Maximum Emergency Rating (kVA)	2023 Peak Loading (kVA)	2023 % Utilization
	T2	10,000	16,000	4690	46.90%
Marley	T1	5,000	7,200	3384	67.68%
Martha	T1	10,000	10,000	3274	32.74%
	T2	10,000	10,000	3377	33.77%
Mount Forest	T1	6,000	10,000	3660	61.00%
Partridge	T1	5,000	6,600	3363	67.26%
Pinecove	T1	5,000	6,000	3852	77.04%
Pinedale	T1	5,600	7,500	3500	62.50%
Port Nelson	T1	6,000	7,500	4044	67.40%
Spruce	T1	6,000	10,000	4792	79.87%
Walkers	T1	6,000	10,000	4326	72.10%
Woodward	T1	6,000	6,000	2568	42.80%
	T2	6,000	6,000	3312	55.20%
13.8 kV					
Fairview	T1	10,000	12,500	4300	43.00%
	T2	10,000	12,500	0 ¹⁴	0% ⁵
Interchange	T1	10,000	16,600	7875	78.75%
Lowville	T1	10,000	16,600	6174	61.74%
	T2	10,000	16,000	0 ⁵	0% ⁵
Orchard	T1	10,000	16,000	5631	56.31%
Palmer	T1	10,000	16,000	6309	63.09%
	T2	10,000	16,000	6008	60.08%
Reservoir	T1	15,000	25,000	7818	52.12%
	T2	15,000	25,000	8418	56.12%
Towerline	T1	15,000	25,000	7037	46.91%
	T2	15,000	25,000	9025	60.17%
Tyandaga	T1	10,000	12,500	7240	72.40%
	T2	12,000	15,000	7317	60.98%

- 1
- 2 Although, 66% of the transformers had more than 50% system utilization in 2023 based on base
- 3 capacity, most of these transformers have additional emergency capacity.

¹⁴ Utilization on T2 at both Fairport and Lowville is 0% in 2023, as these transformers are designated for contingency purposes and not loaded during normal operations.

Feeder Capacity

BHI's customers are supplied through the 27.6kV, 13.8kV, and 4.16kV systems. When necessary, loads are transferred from one feeder to another on the same system voltage to facilitate planned and emergency work which may impact the individual feeder peak load that is recorded on the day of the system peak. BHI typically designs distribution feeder networks so that two of three feeders can carry 100 percent of the load if the third feeder becomes unavailable.

Table 5.3-11 to Table 5.3-13 identify the 2024 feeder utilization statistics for 27.6kV, 13.8kV, and 4.16kV feeders, respectively. Highlighted cells indicate feeders where the peak load exceeded the planning capacity in 2024. It should be noted that the allocation of capacity is based on planning capacity which takes into account the system reliability and "N-1" contingencies. As developer and other capacity needs occur, BHI reviews these on a case-by-case basis to understand if capacity upgrades are required.

Table 5.3-11: BHI 27.6-kV Feeder Utilization

Feeder	Planning Capacity (Amps)	2024 Peak Load (Amps)	2024 % Utilization
Palermo TS			
A4M5	300	242	80.67%
A4M6	300	305	101.67%
Cumberland TS			
76M21	300	186	62.00%
76M22	300	264	88.00%
76M23	300	31	10.33%
76M24	300	110	36.51%
76M25	300	331	110.33%
76M26	300	254	84.65%
76M27	300	229	76.33%
76M28	300	424	141.22%
76M29	300	108	36.00%
76M30	300	289	96.33%
Burlington TS			
39M31	300	242	80.75%
39M32	300	358	119.29%
39M33	300	253	84.39%

Feeder	Planning Capacity (Amps)	2024 Peak Load (Amps)	2024 % Utilization
39M34	300	206	68.77%
39M35	300	245	81.79%
39M36	300	222	73.98%
39M1	300	238	79.19%
39M2	300	167	55.75%
39M3	300	131	43.77%
39M4	300	241	80.23%
39M5	300	220	73.46%
39M6	300	136	45.33%
Tremaine TS			
280M3	300	270	90.00%
280M4	300	294	98.00%
280M5	300	37	12.47%
280M6	300	463	154.33%
280M7	300	0	0.00%
280M8	300	407	135.67%
Bronte TS			
13M25	160	102	63.96%
13M26	160	256	160.16%
13M27	160	194	121.25%
13M28	160	172	107.50%

1

Table 5.3-12: BHI 13.8-kV Feeder Utilization

Feeder	Planning Capacity (Amps)	2024 Peak Load (Amps)	2024 % Utilization
FRVW_F1	200	0	0.00%
FRVW_F2	200	0	0.00%
FRVW_F3	200	0	0.00%
FRVW_F4	200	12	6.16%
INTR_F1	200	119	59.75%
INTR_F2	200	168	84.21%
LOWV_F1	200	74	36.75%
LOWV_F2	200	110	54.81%
LOWV_F3	200	89	44.52%
LOWV_F4	200	59	29.40%
ORCH_F1	200	133	66.36%
ORCH_F2	200	127	63.53%
PALM_F1	200	161	80.43%
PALM_F2	200	152	75.81%
PALM_F3	200	225	112.46%
PALM_F4	200	164	81.90%
RESV_F1	200	217	108.65%
RESV_F2	200	113	56.74%
RESV_F3	200	133	66.59%
RESV_F4	200	228	113.78%
TOWL_F1	200	203	101.50%
TOWL_F2	200	170	85.00%
TOWL_F3	200	208	104.00%
TOWL_F4	200	149	74.50%
TYAN_F1	200	155	77.70%
TYAN_F2	200	196	98.18%
TYAN_F3	200	161	80.54%
TYAN_F4	200	205	102.69%

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Table 5.3-13: BHI 4.16 kV Feeder Utilization

Feeder	Planning Capacity (Amps)	2024 Peak Load (Amps)	2024 % Utilization	Feeder	Planning Capacity (Amps)	2024 Peak Load (Amps)	2024 % Utilization
APBY_F1	200	221	110.50%	MAPL_F1	200	238	119.20%
APBY_F2	200	209	104.50%	MAPL_F2	200	159	79.60%
APBY_F3	200	76	38.00%	MAPL_F3	200	131	65.50%
APBY_F4	200	189	94.50%	MAPL_F4	200	137	68.60%
APBY_F5	200	174	87.00%	MAPL_F5	200	172	86.10%
APBY_F6	200	177	88.50%	MAPL_F6	200	157	78.70%
BRAN_F1	200	156	78.00%	MAPL_F7	200	152	75.90%
BRAN_F2	200	233	116.50%	MAPL_F8	200	207	103.40%
BRAN_F3	200	270	135.00%	MARL_F1	200	175	87.68%
BRID_F1	200	165	82.32%	MARL_F2	200	131	65.63%
BRID_F2	200	115	57.33%	MARL_F3	200	273	136.29%
DRUR_F1	200	231	115.50%	MART_F1	200	170	84.90%
DRUR_F2	200	84	42.20%	MART_F2	200	105	52.40%
DRUR_F3	200	81	40.70%	MART_F3	200	127	63.60%
DRUR_F4	200	132	66.20%	MART_F4	200	110	54.80%
EAST_F1	200	254	126.75%	MART_F5	200	173	86.30%
EAST_F2	200	215	107.55%	MART_F6	200	112	55.80%
EAST_F3	200	221	110.40%	MART_F7	200	122	61.00%
ELGN_F1	200	50	24.89%	MART_F8	200	123	61.60%
ELGN_F2	200	231	115.71%	MTFT_F1	200	220	110.09%
ELGN_F3	200	38	19.01%	MTFT_F2	200	143	71.72%
ELGN_F4	200	193	96.39%	MTFT_F3	200	163	81.46%
ELIZ_F1	200	199	99.33%	PART_F1	200	220	110.10%
ELIZ_F2	200	142	70.98%	PART_F2	200	150	74.80%
ELIZ_F3	200	226	113.19%	PART_F3	200	169	84.40%
FAIR_F1	200	127	63.60%	PICO_F1	200	252	125.80%
FAIR_F2	200	249	124.60%	PICO_F2	200	165	82.30%
FAIR_F3	200	80	40.20%	PICO_F3	200	164	82.10%
FARW_F1	200	124	62.18%	PIDA_F1	200	227	113.51%
FARW_F2	200	187	93.26%	PIDA_F2	200	174	86.84%
FARW_F3	200	0	0.10%	PIDA_F3	200	143	71.72%
FARW_F4	200	205	102.39%	PTNL_F1	200	156	78.00%
FARW_F5	200	226	113.17%	PTNL_F2	200	258	129.00%
FARW_F6	200	157	78.39%	PTNL_F3	200	128	64.00%

Feeder	Planning Capacity (Amps)	2024 Peak Load (Amps)	2024 % Utilization	Feeder	Planning Capacity (Amps)	2024 Peak Load (Amps)	2024 % Utilization
GRAH_F1	200	89	44.73%	PTNL_F4	200	75	37.50%
GRAH_F2	200	101	50.30%	SPRU_F1	200	185	92.40%
GRAH_F3	200	177	88.31%	SPRU_F2	200	259	129.30%
GRAH_F4	200	95	47.36%	SPRU_F3	200	156	78.20%
HAMP_F1	200	203	101.64%	SPRU_F4	200	71	35.70%
HAMP_F2	200	155	77.60%	WALK_F1	200	206	103.01%
HAMP_F3	200	208	103.95%	WALK_F2	200	192	95.76%
HAMP_F4	200	92	45.99%	WALK_F3	200	72	35.91%
HAMP_F5	200	86	43.16%	WALK_F4	200	190	95.24%
HAMP_F6	200	256	128.10%	WOOD_F1	200	38	19.19%
HARV_F1	200	216	107.94%	WOOD_F2	200	202	101.16%
HARV_F2	200	280	140.07%	WOOD_F3	200	145	72.64%
HARV_F3	200	236	118.02%	WOOD_F4	200	176	87.93%
HOWD_F1	200	65	32.40%	WOOD_F5	200	184	92.03%
HOWD_F2	200	25	12.45%	WOOD_F6	200	189	94.39%
HOWD_F3	200	66	33.15%				

Most of the feeders supplying BHI customers have excess capacity to accommodate general load growth such as small service upgrades, new in-fill residential connections and small general service connections without impacting system performance and reliability.

BHI operates its feeders at capacities that allow it to accommodate reasonable load growth, and provide contingency for backing up other feeders in case of a feeder interruption. The latter provides redundancy to maintain system reliability for customers. In most cases, BHI has sufficient capacity at the feeder level, and overall, has excess system capacity at the TSs feeding into BHI's distribution network. However, a significant increase in demand as a result of new customer growth as identified in Section 5.3.2.1.6 above, particularly in locations where existing feeder capacities are constrained, will require an expansion of BHI's distribution infrastructure to bring available capacity from the TSs to customer sites.

Investments related to customer requests which require system expansions are assessed on a case-by-case basis, depending on the nature of the customer request. In these cases an

1 economic evaluation is carried out to determine the capital contributions, if any, required from
2 the customer.

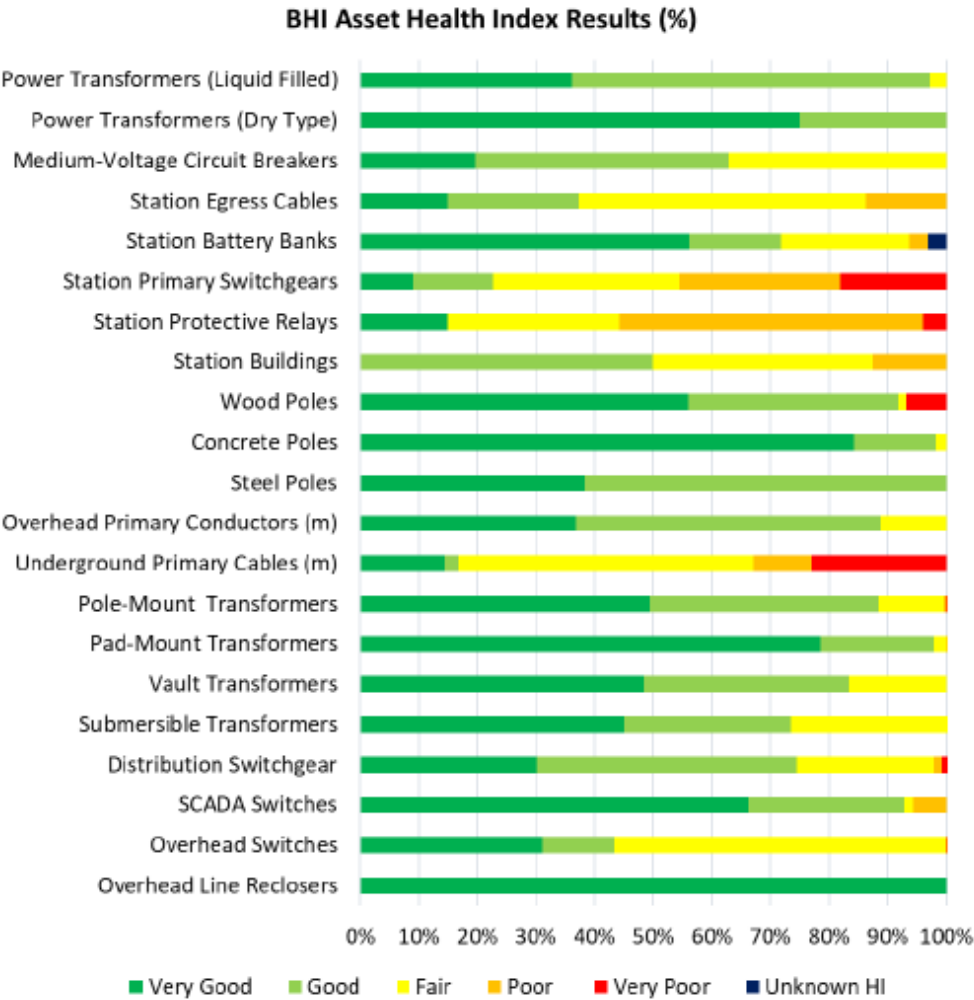
4 **5.3.2.2.2 Asset Condition**

5 An ACA is the process of analyzing the condition and performance of an asset and its individual
6 components using multiple data sources, to assess its overall health. Further information about
7 BHI's ACA, attached as Appendix I to this DSP, are provided in Section 5.3.1.4.

8
9 BHI's asset condition by asset type is provided in Figure 5.3-4 and Table 5.2-14 below. This
10 information was compiled as part of the ACA carried out by BBA, a third-party consultant. The
11 ACA assessed the health and condition of station and distribution assets in-service. The ACA is
12 based on data compiled to the end of April 2024, and it was completed in August 2024. Data
13 collection of asset condition was completed by leveraging BHI's current maintenance activities,
14 such as visual inspections, infrared scanning, pole testing, cable testing, and power equipment
15 oil sampling.

1

Figure 5.3-4: Health Index Distribution for each Asset Class



2

1

Table 5.3-14: Health Index Percentage Breakdown by Asset Class

Asset Class	Population	Health Index Distribution (%)				
		Very Good	Good	Fair	Poor	Very Poor
IntelliRupter Reclosers	14	100%	0%	0%	0%	0%
Overhead Switches	4,049	31%	12%	57%	0%	0%
SCADAmate Switches	71	66%	27%	1%	6%	0%
Distribution Switchgear	239	30%	44%	23%	1%	1%
Submersible Transformers	768	45%	29%	27%	0%	0%
Vault Transformers	66	48%	35%	17%	0%	0%
Pad-Mount Transformers	4,066	79%	19%	2%	0%	0%
Pole-Mount Transformers	3,179	50%	39%	11%	1%	0%
Underground Primary Cables (KM)	686	14%	3%	50%	10%	23%
Overhead Primary Conductors (KM)	830	37%	52%	11%	0%	0%
Steel Poles	26	38%	62%	0%	0%	0%
Concrete Poles	227	84%	14%	2%	0%	0%
Wood Poles	15,038	56%	36%	2%	0%	7%
Station Buildings	32	0%	50%	38%	13%	0%
Station Protective Relays	127	15%	0%	29%	52%	4%
Station Primary Switchgears	44	9%	14%	32%	27%	18%
Station Battery Banks	32	56%	16%	22%	3%	0%
Station Egress Cables	23	15%	22%	49%	14%	0%
Medium-Voltage Circuit Breakers	132	20%	43%	37%	0%	0%
Power Transformers (Dry Type)	8	75%	25%	0%	0%	0%
Power Transformers (Liquid Filled)	36	36%	61%	3%	0%	0%

2 (Note: Percentages in fractions are rounded to the nearest whole number)

3

4 The majority of asset classes exhibit a condition degradation pattern that can be expected of a
5 mature utility, requiring regular System Renewal to mitigate increased failure risks of assets.
6 BHI has allocated its capital budget dollars to ensure assets most at risk of failure are prioritized
7 for renewal. Table 5.3-14 above indicates that underground primary cables, poles and station
8 assets are most in need for intervention over the planning horizon, based on their overall
9 condition assessment. Accordingly, BHI has increased spending in the underground cable

1 replacement and pole replacement programs, as well as maintaining a consistent level of
2 spending to rehabilitate major station and switch assets.

4 **5.3.2.2.3 Asset Risks**

5 As previously noted in Section 5.3.1, BHI's AM strategy covers the full life cycle of a fixed asset,
6 from the preparation of the asset specification and installation standards, to the scope and
7 frequency of preventative maintenance during the asset's service life, and finally to the
8 determination of the assets' end-of-life and retirement from service. At each stage of an asset's
9 life cycle, decisions are made to achieve the right balance between achieving maximum life
10 expectancy, highest operating performance, lowest initial investment (capital costs), and lowest
11 operating costs.

12
13 Asset and project risks (which are determined by the probability of failure multiplied by the
14 consequence of failure) are considered as part of BHI's prioritization process over the forecast
15 period. Additional information on this process provided in Section 5.2.1.3.

17 **5.3.2.3 Transmission or High Voltage Assets**

18 BHI does not have any transmission or high voltage assets (> 50kV).

20 **5.3.2.4 Host & Embedded Distributors**

21 BHI is not an embedded or host distributor. BHI leases two dedicated feeders from Oakville
22 Hydro that supply its service territory, from Bronte TS.

5.3.3 Asset Lifecycle Optimization Policies and Practices

This section presents BHI's asset lifecycle optimization and risk management procedures and practices. BHI owns and operates assets within its service territory and is responsible for the management of all its distribution and station assets. BHI maintains the efficiency and reliability of its system through active inspection, maintenance, and Asset Management processes. The objective of BHI's asset lifecycle optimization policy is to provide the optimal level of service to customers by ensuring the electrical system operates as designed, constructed, and maintained to ensure its reliability, safety, and affordability. This includes consideration of future capacity requirements to avoid premature replacement due to capacity constraints. The specific description of procedures and practices in the following sub-sections describe the policies and practices BHI employs to those asset lifecycle objectives.

The asset lifecycle practices and procedures employed by BHI are asset-specific and range from visual inspections to more in-depth examinations, such as testing and analysis. The information gathered from these practices is used to determine a course of action with respect to the asset and primarily informs the System Renewal portion of BHI's capital plan.

5.3.3.1 Asset Replacement and Refurbishment Policy

Asset Replacement Practices

BHI's asset replacement practices include a combination of proactive and reactive asset replacement. Several factors inform the decision to replace an asset, including asset condition, risk of failure, impact of failure (safety, reliability, environmental), number of customers or load impacted, asset performance, obsolescence, and industry standards. Proactive replacement is utilized where assets have deteriorated to the point where the risk of failure is high, and the impact of that failure poses a significant safety, reliability or other risk to BHI, its customers, or the public. Reactive replacement is utilized where assets can fail safely posing little to no impact to BHI's asset management objectives.

1 Due to operational safety and reliability reasons, all existing submersible transformers are being
2 phased out of the system at the end of their useful life and replaced with above ground pad-
3 mount transformers. If an underground area with below ground primary services and overhead
4 secondary services is renewed or upgraded, all overhead services are replaced with
5 underground services.

6
7 Concrete poles are installed only as replacements for existing concrete poles, in areas
8 designated by the City of Burlington or in locations where a self-supporting structure is
9 necessary. All other new overhead installations are built using wood poles only.

10 Where live-front switching cubicles are subject to moisture or high-water table exposure, these
11 are replaced with dead-front units that have, by design, better protection against these
12 elements.

13
14 Re-build of all backyard constructions shall be relocated to municipal right-of ways where
15 possible, other than like-for-like replacements or repairs.

16
17 BHI has started implementation of a pilot program for primary cable testing and injection.
18 Budgets are allocated annually for the replacement of primary cables in older underground
19 areas that have experienced cable faults and repeat interruptions. A portion of these funds will
20 now be utilized for injection of candidate cables (cables whose test results would support
21 injection). BHI will evaluate the post-injection performance of the cables to complement the
22 cable replacement program with an injection program. This will allow BHI to enhance the useful
23 life of older infrastructure and defer certain replacements to future years.

24
25 All porcelain insulators are being replaced with polymeric insulators. These replacement efforts
26 are undertaken within System Renewal program (i.e., if the pole is being replaced and has
27 porcelain insulators, these shall be replaced as well).

28
29 Equipment that has been identified as defective due to repeated failures or manufacturer recall
30 is systematically replaced through a planned replacement program. This process involves
31 location identification, GIS tracking and monitoring. BHI's asset replacement strategies with
32 regard to its different asset classes are summarized in Table 5.3-15 below.

1

Table 5.3-15: Summary of BHI's Asset Replacement Practices

Asset Class	Primary Replacement Strategy	Description
Poles	Proactive	BHI identifies poles for replacement based on condition and replaces them proactively due to the potential reliability and safety impact if failure occurs. Pole replacements are prioritized depending on their level of degradation, with the most severely degraded poles replaced immediately.
Distribution Switchgear	Proactive	Overhead mechanical air-break switchgears, which are primarily at substation locations, are replaced based on asset condition. Switchgears are examined, lubricated, exercised, and failing components are replaced each year to extend their functional life. Impending component failures are prevented through proactive component replacement whenever possible, and when necessary, the entire switch is replaced.
Underground Primary Cable	Proactive	Underground primary cable is replaced proactively due to the high impact on interruption duration if a failure occurs. Identifying and replacing or repairing faulted underground primary cables is time and labour intensive. BHI prioritizes replacement in areas with segments where two or more faults have occurred, as these segments will create damage in adjacent segments if they fault again. Segments that have never faulted are tested to determine the health of the insulation and remaining life in the cable.
Station Power Transformer	Proactive	Station power transformers are replaced proactively due to the criticality of these assets. Due to the size of the load served by each transformer, there can be a significant impact to reliability and safety if a failure occurs. Station power transformers are prioritized for replacement when they begin to demonstrate early signs of internal failure based on BHI's engineering assessment of condition (i.e., dissolved gas analysis, loading history, insulation power factor, oil quality, service age, and visual inspections).
Station Circuit Breakers	Proactive	BHI regularly tests station circuit breakers for operability and replaces them based on asset condition. Many of the breakers within the 32 substations are obsolete with no ability to obtain spare parts. As stations are upgraded, breakers are replaced with modern units and removed units are retained as spares for remaining older breakers at other stations.
Station Primary Switchgears	Proactive	Overhead mechanical air-break switchgears at substation locations are replaced based on asset condition. Switchgears are examined, lubricated, exercised, and failing components are replaced each year to extend their functional life. They are replaced proactively because, due to the size of the load served by each primary switchgear, there can be a significant impact to reliability and safety if a failure occurs.
Battery Banks & Chargers	Proactive	During regular station checks, batteries and chargers are inspected and tested. This inspection data is recorded by BHI's stations team. When battery testing reveals signs of degradation, batteries are earmarked for replacement based on the level of deterioration, so that breaker operation remains available during interruptions.

Asset Class	Primary Replacement Strategy	Description
Protective Relays	Proactive	As part of regular station checks, protective relays and circuit breakers are tested together. Many of the protective relays across BHI's 32 substations, like breakers, are obsolete and spare parts are no longer available. Testing results are a component of the condition-based information used to prioritize station upgrades to modern equipment. Replacements are planned based on the operability, future maintenance and obsolescence of these components.
Overhead Primary Conductor	Reactive	Overhead primary conductor is generally not part of the asset replacement program. However, as part of overhead re-builds, re-design, or due to impact from system faults and component failure, conductors are sleeved when required.
Distribution Transformer	Reactive	Distribution transformers are replaced when they become inoperable, leak oil, or are no longer adequate to accommodate new load in the area.
Overhead Switch	Reactive	Overhead line switches are inspected each year using thermography. Switches exhibiting excessive heating are proactively replaced. All other overhead switches are either reactively replaced when they fail or replaced in conjunction with other distribution system upgrades where warranted.
Underground Switch	Reactive	Underground switches are regularly inspected and cleaned and repaired as necessary. They are replaced whenever they cannot be repaired or if they fail.
Recloser	Reactive	Reclosers are inspected each year using thermography. Reclosers exhibiting excessive heating are proactively replaced. All other reclosers are reactively replaced when they fail or have exceeded the manufacturer's limit on number of operations.

Asset Refurbishment Practices

BHI also assesses the opportunity to refurbish assets – rather than replace them – to manage capital expenditures while extending the service lives of assets. This assessment is completed on a case-by-case basis for an asset identified as a replacement candidate. BHI evaluates the option to refurbish an asset based on the following factors:

- Cost of refurbishment vs. replacement
- Remaining useful life
- Extended useful life from refurbishment
- Whether the asset may need to otherwise be replaced due to System Access or relocation work
- Obsolescence and parts availability
- Compliance with applicable standards
- Public safety

1 A description of BHI's refurbishment practices by major asset type is provided below.

3 Air-break Switchgear:

4 Older substations are typically supplied through a pole-mounted three-phase air-break
5 switchgear. BHI's practice is to inspect, lubricate, exercise and service these switches annually,
6 as operation of these switches is critical when performing emergency isolation of substation
7 equipment. Whenever an obsolete unit is replaced by modern equipment, the old unit is retained
8 as a spare parts source so that remaining units in the field can be refurbished as needed,
9 extending their service lives.

11 Pad-mounted Switchgear:

12 Pad-mounted switchgear is inspected regularly using thermography, ultrasound, and visual
13 inspection. They are also cleaned using the dry ice method. When defects are found, they are
14 refurbished in place where possible or swapped out and refurbished either at BHI's facilities or a
15 shop specializing in refurbishment.

17 Substation Circuit Breakers and Protection and Control Relays:

18 All BHI substation circuit breakers and relays are regularly tested. Many breakers have been
19 maintained, refurbished, and remained in service long enough to have reached a stage of
20 obsolescence. Although they may be still functional, spare parts may no longer be available.
21 This is also true of the analog protection and control relays. As substations are upgraded to
22 modern switchgear and digital protection and control systems, the old equipment is retained to
23 serve as a spare parts source for obsolete units still in service. By managing these assets in this
24 way, BHI can extend the life and defer replacement of some operable obsolete units.

26 Pad-mounted Transformers:

27 All pad-mounted transformers are regularly inspected as part of BHI's asset management
28 program. Since they are on the ground and adjacent to roads that are salted in the winter, their
29 outer surfaces are susceptible to weather damage and significant rusting. If the transformers are
30 functioning properly and safe for the public, BHI refurbishes the units by removing the rust and
31 repainting in place, without interrupting service to customers. Proactively preventing rust-

through of the transformer tanks prevents oil leakage and extends the service life of the transformer.

Underground Primary Cables:

BHI has a large inventory of underground primary cables that are at or nearing their end-of-life. Majority of these assets are direct buried in ground in built-up areas and their replacement costs are quite high. Recent advances in new testing and injection technologies have shown promising results in extending the life of these assets, in other jurisdictions. BHI plans to implement a program of testing and injection of candidate primary cables and will monitor their performance thereafter (i.e. reduced incidents of cable failure).

Wood Poles:

Similar to underground cables, wood pole replacement is a major capital program that requires significant investments over several years in order to mitigate the risk of pole failures. The majority of these failures are a result of wood rot at the base of the pole which is in contact with the ground. This leads to weakened fiber, thereby compromising the mechanical strength and integrity of the pole. In 2025, BHI is piloting PoleEnforcer, a groundline reinforcement which safely reinforces poles with rot at or below their base to mitigate failures caused by rot, thereby extending their useful life and deferring capital replacement.

5.3.3.2 Description of Maintenance and Inspection Practices

All BHI assets are inspected and maintained in accordance with applicable legislation, manufacturer's recommendations, and good utility practice.

Inspection and maintenance activities are a critical component of BHI's asset management process. Inspection programs help determine asset conditions, identify risk to safety, reliability and/or the environment and subsequently address findings through prudent capital, operations, and maintenance expenditures, as necessary.

The overall goal of inspection and maintenance is to identify and prevent problems and damage from occurring or causing the asset to fail pre-maturely. All maintenance activities are preceded

by routine or extraordinary inspections and/or testing to determine the condition of the assets. The frequency of maintenance generally follows the inspection cycles, although, most inspections will not result in maintenance. The following criteria are used for determining the applicable inspection and/or maintenance cycles:

- Regulatory requirements as determined by the minimum inspections schedule in the DSC; and
- Actual usage, expected life, physical conditions, risk and consequence of failure and the health and safety of public and workers.

These drivers determines the frequency and type of inspection and maintenance activities for a particular asset class.

Inspection and maintenance cycles are planned, whenever possible, to take place during winter months, when fewer capital projects are in progress. 'Routine' inspection or maintenance implies that the program adheres to minimum standards set out in Appendix C of the DSC.

Inspections are completed on the entire distribution system and any exception is identified and reported to BHI management. More than one type of inspection (e.g., visual, thermographic etc.) may be conducted on the same assets for a complete assessment of their condition. Specific inspection or testing may be identified for a particular class of assets.

For fleet assets and other non-infrastructure assets, maintenance activities follow manufacturer's recommendations.

The inspection cycles and patrol inspections for each of the major assets are presented in Table 5.3-16 and a more detailed description of BHI's O&M programs follows.

1

Table 5.3-16: Summary of Inspection and Maintenance Activities

Assets	Category	Activity	Frequency
Overhead distribution assets	Inspections	Visual inspection	3-year cycle
		Infrared scanning	Annually
	Predictive maintenance	Pole testing	After 20 years of service life and every 3 years thereafter
	Preventative maintenance	Vegetation management	3-year cycle
		Scada-Mate switch maintenance	5-year cycle
		Manual load interrupting switch maintenance	3-year cycle
		Insulator washing	Twice per year
Underground distribution assets	Inspections	Visual inspection	3-year cycle
		Cable testing (targeted)	Annually
	Preventative maintenance	Switching cubicle inspection and cleaning	3-year cycle
Station assets	Inspections	Visual inspection	Monthly
	Predictive maintenance	Oil testing of Power Transformers	Annually, monthly or quarterly
	Preventative maintenance	Whole station	5-year cycle
		Breakers and relays	3-year cycle

2

3 BHI's maintenance planning strategies ensure that its distribution and station assets are
 4 maintained in an appropriate condition to perform their intended purpose, while minimizing
 5 lifecycle costs. BHI has a tiered approach towards meeting its maintenance needs. These
 6 needs are generally prioritized based on the following:

- 7 • Activities driven by health and/or safety concerns.
- 8 • Activities driven by external demands (e.g., customer, City of Burlington, or other road
 9 authorities).
- 10 • Reactive maintenance (identified during visual patrols).
- 11 • Preventative maintenance.
- 12 • Activities driven by high-level planning.

1 Visual Inspection of Pole-mounted/Pad-mounted Transformers:

2 Patrol inspections are scheduled every three years in accordance with the minimum inspection
3 requirements of the DSC. Common issues that may be found during inspections include
4 vegetation overgrowth; graffiti; oil leaks; deteriorated condition of cross arms, insulators, and
5 lightning arresters; deteriorated integrity of grounding wire or grounding guard; and surface
6 rusting requiring repainting.

7
8 Infrared Thermography of the Overhead system and Municipal Substations (MSs):

9 Annual inspection and scanning of the overhead system and MSs are an important part of BHI's
10 preventative maintenance program. Any hot spots on pole-mounted transformers, overhead
11 switches, insulators, or lightning arresters identified during thermography of the overhead
12 distribution system are scheduled for replacement or repair.

13
14 Wood Pole Testing:

15 Wood poles are tested after 20 years of service and every three years thereafter. The testing is
16 performed by a third-party contractor using specialized test equipment. Various degradation
17 factors are assessed, including remaining pole strength, rot, mechanical defects, and whether
18 the pole is out of plumb. The condition data is used to determine a HI, which BHI uses to identify
19 poles for replacement. Poles identified for replacement that are equipped with transformers or
20 underground cable connections are assigned a higher priority due to an increase in risk
21 (reliability, environmental, safety) if that pole fails.

22
23 Vegetation Management:

24 Burlington is a heavily treed community, particularly throughout the Greenbelt, and, as such,
25 BHI's vegetation management program is completed on a proactive three-year cycle by certified
26 arborists for the entire distribution system. Due to the exposure of BHI's distribution system to
27 strong winds from Lake Ontario, this is an important program to mitigate interruptions due to
28 tree contacts. On average, during the years 2020-2024, 13% of the Interruptions, 18% of
29 Customers Interrupted, and 21% of Customer Hours Interrupted were a result of tree contact
30 (excluding major events). Vegetation-related power interruptions have a significant impact on
31 system reliability and are one of BHI's leading causes of system interruptions.

1 Manual Load Interrupting Switch Maintenance:

2 Load Interrupting Switches are maintained on a three-year cycle. Switches are isolated for BHI's
3 crews to open/close the switch to make repairs and adjustments, including checking for smooth
4 operation of mechanisms and adding lubrication where necessary.

5
6 Scada-Mate Switch Maintenance:

7 BHI contracts a third party to perform initial infrared scanning and visual inspection prior to BHI
8 crew maintenance of its Scada-Mate switches, which BHI performs in accordance with
9 manufacturer recommendations. This is a responsive program based on inspections that occur
10 on an annual basis. BHI introduced this program in 2024 to mitigate the risk of failures and
11 customer outages. BHI experienced an unprecedented number of premature failures from 2020
12 to 2023. In addition, the maintenance recommendations from the manufacturer have changed
13 since BHI's 2021 Cost of Service application. These changes resulted in the requirement to
14 maintain these assets on regular basis. Mitigation of failure risk is critical for the following
15 reasons:

- 16 • Scada-Mate switches are vendor specific and technology intensive. They are not
17 interchangeable with those from other vendors without potential compatibility issues or
18 loss of functionality. BHI cannot maintain a sizeable off-the-shelf inventory due to the
19 risk of obsolescence from changing technologies and components. As SCADA enabled
20 devices, these switches play a pivotal role in the FLISR schemes as part of the
21 overhead distribution system to reduce response time to outage events and minimize
22 the impact on customers through improved overall system reliability.
- 23 • Scada-Mate switches have a significant lead time and unplanned failures can place the
24 reliability of BHI's distribution system at risk, particularly during storms and other climate
25 related events. This program is executed as part of a five-year maintenance cycle.

26
27 Insulator Washing:

28 Insulator washing is an important preventative measure to reduce the probability of flashovers
29 and pole fires. Particular attention is given to the 27.6-kV system including any areas where
30 there are under-built circuits and areas with potential for high salt contamination (i.e., adjacent
31 to highways and heavy traffic roads). Insulator washing is targeted in areas near the HWY 403

1 and 407 corridor as well as along major arterial roads and carried out twice per year in January
2 and April due to potential impacts from road salt in the environment.

3
4 Vault Inspection and Cleaning:

5 Customer-owned vaults that contain BHI distribution equipment are inspected to ensure the
6 equipment is in good condition and is not comprising operational and public safety. The
7 inspection and cleaning cycle follows the 3-year inspection frequency as per the designated
8 inspection areas (Fig. 5.32 in Section 5.3.1.1.5).

9
10 Submersible Transformers:

11 Submersible transformers are inspected as part of the annual transformer visual inspection
12 process.

13
14 Live-Front Switching Cubicles' Cleaning:

15 A specialized maintenance technique using “dry ice” is employed to clean switching cubicles.
16 This work can be safely completed while the equipment is energized, which eliminates the
17 labour time and cost of switching activities and minimizes the time to complete the process.
18 Cubicles are identified for cleaning during the field visit inspection, at which time all cubicle
19 connections are viewed with thermography and scanned for ultrasound to detect early signs of
20 potential faults.

21
22 Cable Testing:

23 BHI owns approximately 686 km of underground primary cables within its service territory, of
24 which 159km (23%) of cables are in very poor condition and 68km (10%) are in poor condition
25 based on BHI's ACA, attached as Appendix I to this DSP. BHI's underground system typically
26 consists of TR-XLPE type cables. Because they are situated underground, they are more
27 expensive and challenging than overhead lines to manage and assess their condition. Some of
28 the older underground infrastructure is radially connected and as such, failure of a cable as part
29 of the supply backbone can potentially cause outage to all the customers connected
30 downstream of that segment. Since the majority of these cables are direct buried, locating and
31 isolating these faults is difficult, and the duration of the outages can be significant, adversely
32 impacting reliability. In addition, once a cable fails in one location, it becomes highly likely that

1 there will be other failures in the future, if detection and intervention is not planned in a timely
2 manner.

3
4 In the past, underground cable data such as age, historical failures, and number of joints were
5 used to determine appropriate replacement strategies for underground primary cables. The
6 reason for this was that these cables are installed below grade, and visual inspection to
7 determine their condition is not possible except at the termination points (where the cables
8 connect to end equipment). Today, BHI utilizes cable diagnostic testing which provides a more
9 accurate assessment of the condition of underground cables, splices, joints, and terminations. It
10 enables predictive analysis and allows BHI planners and engineers to effectively determine the
11 cables that currently are, or will potentially be, at risk of failure. Cable testing is an accepted
12 practice industry-wide and used in numerous other electrical utilities in Canada and the United
13 States.

14
15 As cables age, the likelihood of failure increases as a result of water treeing, electrical treeing,
16 and insulation breakdown, particularly in areas with high moisture levels, lower heat dissipation
17 (due to ground resistivity or ambient temperature) or operational conditions (such as loading).
18 Testing is performed on cables which are at or near their end of service life, or in areas which
19 have already experienced outages due to cable failures. This is part of BHI's annual testing
20 program. The results from the cable testing can identify candidates for cable injection (cable
21 injection is a proprietary method of injecting a solution to reduce the formation of water trees in
22 the insulation thereby restoring it's di-electric strength and potentially extending the life of the
23 cable). Cables that cannot be injected (e.g. due to large number of splices in a particular section
24 of the cable) are identified for replacement under the primary underground rebuild program.
25 Sample cable testing is performed by a third party engineering company and is prioritized in
26 areas exhibiting higher frequencies of cable faults.

27
28 BHI has experienced an upward trend of cable failures in the last five years, as identified in
29 Figure 10 of Exhibit 4, which is indicative of aging infrastructure which requires repair or
30 replacement.

Municipal Substation (MS) Assets:

All MS assets are inspected as part of a monthly visual inspection, which includes a thorough inspection, and minor repairs of any deficiencies found at that time. Oil testing is conducted for station transformers based on samples obtained annually, monthly or quarterly, depending on the criticality of the transformer and the results of the last oil test. Oil testing is an important part of the ACA process for station transformers. Detailed preventative maintenance for station breakers and relays is conducted every three years, which includes breaker testing, relay calibration, and verification of the condition of protection relays. Detailed preventative maintenance for the whole station is conducted every five years.

5.3.3.3 System Renewal Spending

5.3.3.3.1 Forecasting

The project needs for a particular period are supported by a multitude of factors, depending on the information available 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 BBA 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 major infrastructure assets was assessed and expressed on a normalized index in the form of a HI. The HI was related to the probability of failure values for each asset, using a weighted average approach, as described in detail in Appendix I. As part of the ACA, each asset was assigned a health indicator expressed as "very good," "good," "fair," "poor," and "very poor." The resulting information from the ACA study was used as a key input to forecast the System Renewal needs of BHI's assets over the forecast period. Assets that were identified to be in poor and very poor condition are prioritized for replacement over the planning horizon. Of these assets, criticality is determined based on the location, number of customers impacted, operability, in conjunction with asset replacements that may occur as part of system expansion and road relocation projects.

5.3.3.3.2 Prioritization and Optimization

As previously detailed in Section 5.3.1.3, BHI uses its Prioritization Tool to standardize risk assessment across a range of projects, providing an objectives-based ranking of each project's contribution to BHI's asset management objectives. Project planners choose from a standardized list of impact and probability outcomes for each of the asset management objectives listed in Table 5.3-1 to determine a score for each project.

Risk consequences related to reliability, safety, operating efficiency, for each project area with assets found in "poor" or "very poor" condition are identified and calculated by multiplying the composite probability of asset failure with the consequence of failure. Costs for the scope of work to mitigate risk in each project area are determined, using BHI's estimating tool. 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.

Based on the choices, each investment receives an overall score indicating its contribution to the achievement of BHI's asset management objectives, which BHI uses to rank each project in order of need and value. In addition, the tool allows for mandatory projects to be flagged for automatic inclusion in the budget (such as the System Access projects). Mandatory projects are prioritized first; however, each of them still receives an overall score for comparability purposes. The outcome of this step is a prioritized list of projects based on the scores generated in the project prioritization step of BHI's asset management process.

The continued performance of assets is also managed through BHI's capital investments and maintenance programs. BHI'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. Information obtained through asset databases, maintenance and inspection records, and interruption records is a critical input into prioritizing and optimizing which projects will bring the best value.

5.3.3.3.3 Strategies for Operating within Budget Envelopes

The proposed System Renewal expenditures over the forecast period reflect the minimum investment required in order to address declining reliability due to the failure of aging infrastructure. System Renewal programs have been paced to balance reliability and safety outcomes with affordability, which customers have identified as a key priority. This is especially critical given the magnitude of mandatory System Access expenditures expected over the forecast period, which put upward pressure on the overall bill impact to customers.

BHI will continue to complete investment planning on an annual basis to help inform any necessary budget adjustments for the following years. BHI understands that circumstances may change, and if needed, budgets can be re-prioritized depending on customer and system needs. For example, due to the mandatory 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 BHI to use the best available information to effectively plan for and manage the highest priority projects and programs over the forecast period while mitigating overspending against approved budget envelopes.

5.3.3.3.4 Risks of Proceeding / Not Proceeding

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 BHI considers 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.

Different assets carry inherently different risk profiles depending on their condition, criticality, and impacts if a failure occurs. For example, station power transformers have a higher consequence if failure occurs than pole mount transformers, due to the number customers connected and their location within the distribution system. Assets with low HIs and higher consequence of failure are given a priority for replacement relative to assets with low HIs and lower consequence of failure.

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

BHI has made the following changes to its asset life optimization policies and processes since the last DSP filing:

- **Increase in wood pole testing frequency:** BHI has a large population of wood poles which are critical assets that support the entire overhead distribution system. Since wood is a naturally occurring material, it is exposed to environmental factors such as high winds, moisture, atmospheric salt, and carpenter ants. These can cause the wood to decay and lead to unpredictable failures. In order to monitor these impacts more rigorously, BHI has increased the frequency of pole testing cycle from 7 years to 3 years which brings it in line with the minimum inspection requirements of the DSC. Furthermore, it allows BHI to collect more frequent data on potential failure risks for timely intervention and prepare plans for mitigation measures.
- **Cable Injection as an alternative to cable replacement:** BHI has 626 km of underground primary cable of which 33% is in poor or very poor condition (Table 5.3 14). This has led to an increasing trend in the number of cable faults over the past 5 years, as shown in Table 5.4 11. Replacing this ageing infrastructure would require significant investment over multiple years that would not be financially viable. Consequently, BHI is piloting a project in 2025, of using a proprietary cable injection method to maintain the dielectric strength of the insulation of end-of-life primary cables that can potentially extend the useful service life. The success of the pilot (based on no repeat failures) will allow BHI to extend the program to a larger pool of underground cables that are at or approaching end of life.
- **Wood pole re-enforcement as an alternative to replacement:** Similar to underground cables, wood pole replacement is a major capital program that requires significant investments over several years in order to mitigate the risk of pole failures. The majority of these failures are a result of wood rot at the base of the pole which is in contact with the ground. This leads to weakened fiber, thereby compromising the mechanical strength and integrity of the pole. In 2025, BHI is piloting PoleEnforcer, a groundline reinforcement which safely reinforces poles with rot at or below their base to preserve the structural integrity of the pole and mitigate failures caused by rot. This program

extends the useful life of the pole and defers capital replacement. The pilot program will target mostly secondary poles and service poles.

- **Scada-Mate Switch Maintenance:** As identified above in Section 5.3.3.2, BHI introduced a Scada-Mate Switch Maintenance program in 2024 to mitigate the risk of failures and customer outages. BHI experienced an unprecedented number of premature failures from 2020 to 2023. In addition, the maintenance recommendations from the manufacturer have changed since BHI's 2021 Cost of Service application. These changes resulted in the requirement to maintain these assets on regular basis.

5.3.4 System Capability Assessment for REG & DERs

BHI provides information on the capability of its distribution system to accommodate REG, including a summary of its load and REG connection forecast by feeder/MS below. Information identifying specific network locations where constraints are expected to emerge due to forecast changes in load and/or connected renewable generation capacity is also provided.

5.3.4.1 Applications for Renewable Generators over 10 kW

Table 5.3-17 lists the only current application from renewable generators over 10 kW for connection to BHI's service area. All the applications are part of the Net Metering program.

Table 5.3-17: List of REG Applications over 10 kW

Feeder	Application	Type	Capacity (kW)	Estimated Connection Year
39M6	Application 1	Solar Roof Top	185	2025
Total Capacity (kW)			185	

5.3.4.2 Forecast of REG Connections

BHI has forecasted the number and capacity of REG connections for the years 2025 through 2030 based on the applications being processed and those expected to be received as part of the Net Metering Program.

Table 5.3-18: REG Applications and Connection Forecast

	REG Connection Forecast						
	2025	2026	2027	2028	2029	2030	Total
# of Applications	1	2	2	2	2	2	11
Capacity (MW)	0.25	0.4	0.4	0.4	0.4	0.4	2.25

5.3.4.3 Capacity Available

There is sufficient capacity to connect new REG at four TSs: Bronte TS, Burlington TS, Cumberland TS, and Tremaine TS, as detailed in Table 5.3-19. Palermo TS currently lacks REG connection capacity due to constraints on HONI's assets.

1 **Table 5.3-19: Available Capacity at the Transformer Stations for REG Connection**

Station Name	Feeder	Total Capacity (kW)	Used Capacity	Available Capacity
Bronte TS	13M25	4500	20	
Bronte TS	13M26		78	
Bronte TS	13M27		750	
Bronte TS	13M28		493	
Bronte TS	Total	4500	1341	3159
Burlington TS	39M1	5000	145	
Burlington TS	39M2		244	
Burlington TS	39M3		0	
Burlington TS	39M4		378	
Burlington TS	39M5		699	
Burlington TS	39M6		44	
Burlington TS	39M31	5000	27.5	
Burlington TS	39M32		356	
Burlington TS	39M33		436.4	
Burlington TS	39M34		595	
Burlington TS	39M35		110	
Burlington TS	39M36		48	
Burlington TS	Total	10000	3082.9	6917.1
Cumberland TS	76M21	5000	150	
Cumberland TS	76M23		387	
Cumberland TS	76M25		144.1	
Cumberland TS	76M27		0	
Cumberland TS	76M29		2.25	
Cumberland TS	76M22	5000	84.1	
Cumberland TS	76M24		566.2	
Cumberland TS	76M26		83	
Cumberland TS	76M28		142.5	
Cumberland TS	76M30		2315.3	
Cumberland TS	Total	10000	3874.45	6125.55
Tremaine TS	280M3	2000	280.5	
Tremaine TS	280M5		103.4	
Tremaine TS	280M4	5000	97	
Tremaine TS	280M6		164.1	
Tremaine TS	280M8		120.3	
Tremaine TS	Total	7000	765.3	6234.7
TOTAL		31500	9063.65	22436.35

2

5.3.4.4 Constraints – Distribution and Upstream

BHI cannot connect any new generation in the service area supplied from Palermo TS and does not have approval from HONI to do so. HONI has provided guidance to BHI to refrain from connecting generators to either of the two feeders in the portion of BHI's service territory that is served by Palermo TS, A4M5 and A4M6.

5.3.4.5 Constraints – Embedded Distributor

Constraints with respect to embedded distributors are not applicable because BHI is not an embedded distributor nor does it have any embedded distributors within its service territory.

5.3.5 Non-Wires Solutions ("NWS") to Address System Needs

BHI has not proposed any NWS for this upcoming rate period. BHI has considered the applicability of non-wires solutions (NWS) for specific projects exceeding the OEB's \$2 million threshold, specifically the MTSA projects at Appleby GO, Aldershot GO, and Burlington GO as described in the Material Investment Summary Documents attached as Appendix A to this DSP.

Based on BHI's assessment, NWS is not a viable alternative for these traditional infrastructure investments. The forecasted demand increase in the MTSA's requires system expansion that provides reliable and scalable capacity. Non-wires alternatives such as Conservation and Demand Management ("CDM") or DERs are not practical, as they would either fail to provide the necessary and sustained capacity, or require complex and costly modifications to the existing network. Additionally, the projects involve extending BHI's physical infrastructure to serve new customers, a requirement that cannot be met through NWS.

BHI carried out an Energy Storage Feasibility Study in 2024 to assess the applicability of integrating battery energy storage systems ("BESS") into its grid. The objective of the study was to explore the feasibility, benefits, and challenges of integrating a BESS into BHI's grid and to understand how BESS could support local load demands and provide flexibility in discharge and

- 1 power capacity. Although the solution is not a good fit for the MTSA projects as stated above,
- 2 BHI will continue to explore the feasibility of similar solutions to meet specific requirements.
- 3 BHI will continue to explore NWS as the opportunity arises during the 2026-2030 forecast period
- 4 and will take into account learnings from NWSs that have been undertaken by other LDCs.

1 5.4 Capital Expenditure Plan

5.4.1 Capital Expenditure Summary

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

Category	Historical												Bridge Year		
	2021			2022			2023			2024			2025		
	Plan.	Act.	Var.	Plan.	Act.	Var.	Plan.	Act.	Var.	Plan.	Act.	Var.	Plan.	Bgt.	Var.
	\$ '000		%	\$ '000		%	\$ '000		%	\$ '000		%	\$ '000		%
System Access															
Gross Capital Spend	29,646	13,263	-55%	10,905	9,644	-12%	9,574	25,277	164%	8,074	17,736	120%	8,074	27,614	242%
Capital Contributions	-20,608	-8,882	-57%	-5,899	-5,551	-6%	-4,568	-20,324	345%	-4,005	-10,682	167%	-4,005	-15,470	286%
Net Capital Expenditures	9,037	4,381	-52%	5,007	4,093	-18%	5,007	4,954	-1%	4,069	7,054	73%	4,069	12,144	198%
System Renewal															
Gross Capital Spend	3,055	4,175	37%	3,490	5,168	48%	3,215	5,398	68%	3,215	5,658	76%	3,215	4,335	35%
Capital Contributions	-	-2	-	-	-6	-	-	-19	-	-	- 37	-	-	-	-
Net Capital Expenditures	3,055	4,173	37%	3,490	5,162	48%	3,215	5,379	68%	3,190	5,621	76%	3,190	4,335	36%
System Service															
Gross Capital Spend	200	-	-100%	650	177	-73%	700	265	-62%	650	27	-96%	700	-	-100%
Capital Contributions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Capital Expenditures	200	-	-100%	650	177	-73%	700	265	-62%	650	27	-96%	700	-	-100%
General Plant															
Gross Capital Spend	1,198	2,609	118%	2,365	2,015	-15%	1,852	1,467	-21%	1,170	2,217	90%	1,077	2,024	88%
Capital Contributions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Capital Expenditures	1,198	2,609	118%	2,365	2,015	-15%	1,852	1,467	-21%	1,170	2,217	90%	1,077	2,024	88%
Total Expenditure, Gross	34,098	20,047	-41%	17,410	17,004	-2%	15,341	32,407	111%	13,109	25,638	96%	13,066	33,973	160%
Total Capital Contribution	-20,608	-8,884	-57%	-5,899	-5,557	-6%	-4,568	-20,342	345%	-4,005	-10,719	168%	-4,005	-15,470	286%
Total Expenditure, Net	13,490	11,163	-17%	11,511	11,447	-1%	10,774	12,065	12%	9,104	14,919	64%	9,061	18,203	104%
System O&M	9,387	10,691	14%		10,407			11,693			11,342			12,755	

1

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

Category	Forecast				
	2026	2027	2028	2029	2030
	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000
System Access					
Gross Capital Spend	35,695	22,707	21,772	23,697	21,530
Capital Contributions	-20,708	-10,395	-11,882	-11,536	-10,330
Net Capital Expenditures	14,986	12,312	9,891	12,161	11,201
System Renewal					
Gross Capital Spend	6,181	6,219	6,344	6,470	6,601
Capital Contributions	-	-	-	-	-
Net Capital Expenditures	6,181	6,219	6,344	6,470	6,601
System Service					
Gross Capital Spend	510	624	212	325	221
Capital Contributions	-	-	-	-	-
Net Capital Expenditures	510	624	212	325	221
General Plant					
Gross Capital Spend	2,595	5,705	2,886	2,563	1,198
Capital Contributions	-	-	-	-	-
Net Capital Expenditures	2,595	5,705	2,886	2,563	1,198
Total Expenditure, Gross	44,980	35,255	31,215	33,055	29,551
Total Capital Contribution	-20,780	-10,395	-11,882	-11,536	-10,330
Total Expenditure, Net	24,272	24,860	19,334	21,519	19,221
System O&M	13,904				

2

1 5.4.1.1 Plan vs Actual Variances for the Historical Period

2 **Table 5.4-3: Variance Explanations - 2021 Planned Versus Actuals**

Category	2021				Variance Explanations
	Plan.	Act.	Var.		
	\$ '000		\$ '000	%	
System Access, Net	9,037	4,381	-4,656	-52%	<p>This variance was driven by:</p> <p>(a) delays in the implementation of third-party infrastructure relocation projects due to design changes and other delays caused by road authorities. The revenue requirement impacts of the underspent capital expenditures on the Dundas St Road Widening and Waterdown Rd Road Widening projects were captured in approved Capital Variance Accounts¹⁵ and are being proposed for disposition (refunded to customers) in Exhibit 9 of this Application.</p> <p>(b) lower than planned customer-initiated projects (e.g., new connections, upgrades, suite metering, subdivisions) from the COVID-19 related economic slowdown; and</p> <p>(c) favorable final true-up of the Capital Contribution Recovery Agreement (“CCRA”) associated with the construction of two breaker positions by Hydro One Networks Inc. at the Tremaine TS, as actual project costs were lower than anticipated.</p>
System Renewal, Net	3,055	4,173	1,118	37%	<p>This variance was driven by:</p> <p>(a) higher quantities of backlogged work that was deferred from previous years due to COVID-19 related restrictions. This backlogged work included pole replacements and UG cable replacement; and</p> <p>(b) higher unit costs due to COVID-19 related price volatility of major distribution asset components such as underground primary cables, distribution transformers, poles, and switches (overhead and underground).</p>
System Service, Net	200	0	-200	-100%	<p>This variance was driven by the deferral of an intelligent switch installation resulting from COVID-19 procurement related delays.</p>
General Plant, Net	1,198	2,609	1,412	118%	<p>This variance was driven by:</p> <p>(a) higher than planned costs on the CIS replacement project caused by COVID-19 delays and staff turnover in the billing department. This required additional parallel runs and testing of the new CIS prior to going live to ensure accurate billing. This resulted in delays and additional costs associated with CIS project activities;</p> <p>(b) higher than planned costs for OMS integration with BHI’s GIS due to unexpected coding changes to proprietary OMS software in order to properly integrate with new GIS. Software obsolescence impacted the timing of the integration to ensure BHI’s OMS and customer facing portal were unaffected and available.</p> <p>(c) unplanned building expenditures on necessary renovations at 1328 Brant Street, which houses one of BHI’s substations. These renovations included replacing the flat tar roof and installing new exterior stucco to address spalling bricks that were beyond economic repair. Additional facility expenditures were</p>

¹⁵ EB-2020-0007, Decision and Order, p13

Category	2021				Variance Explanations
	Plan.	Act.	Var.		
	\$ '000		\$ '000	%	
					incurred to remodel areas of the head office at 1340 Brant St. to accommodate BHI's growing workforce. This variance was partially offset by the delayed Standby Generator replacement at 1340 Brant St. due to COVID-19 supply chain challenges.
Total Expenditure, Net	13,490	11,163	-2,327	-17%	
Capital Contributions	-20,608	-8,884	11,725	-57%	This variance was driven by lower than planned capital contributions due to the delayed implementation of third-party infrastructure relocation projects, and lower than planned expenditures for customer funded projects associated with connections, upgrades and subdivision developments.
Total Expenditure, Gross	34,098	20,047	-14,051	-41%	

1

Table 5.4-4: Variance Explanations - 2022 Planned Versus Actuals

Category	2022				Variance Explanations
	Plan.	Act.	Var.		
	\$ '000		\$ '000	%	
System Access, Net	5,006	4,093	-913	-18%	This variance was driven by: (a) delays in the implementation of third-party infrastructure relocation projects due to delays caused by the road authority; (b) lower than planned customer-initiated projects (e.g., new connections, upgrades, suite metering, subdivisions) due to lower demand; and (c) delayed expenditures on the Metrolinx GO Corridor Electrification project.
System Renewal, Net	3,490	5,162	1,697	48%	<p>This variance was driven by: (a) higher station transformer replacement costs due to a different transformer being replaced than planned. The budget assumed an existing oil-based station transformer would be replaced with a dry-type transformer, which are typically less costly. At the time of replacement, BHI identified Lowville Transformer 1 (“T1”) as the station transformer most at risk of failure, which could not be replaced with a dry-type transformer since Lowville was a dual-transformer station where both transformers units are oil-based (both transformers must be the same type for impedance matching purposes). Lowville T1 also had additional features (on-load tap changer) to manage voltage fluctuations driven by the location and loading of this station, which added to the replacement cost. (b) Unplanned storm damage costs due to the May 21st windstorm (derecho) which resulted in emergency replacement of damaged equipment as described in BHI’s 2023 IRM application and z-factor claim¹⁶; (c) unexpected emergency replacements of deteriorated infrastructure such as underground primary and secondary cables (driven by 33 cable faults), poles and switches that were approaching end-of-life but failed earlier than anticipated; and (d) higher unit costs due to COVID-19 related price volatility of major distribution asset components such as underground primary cables, distribution transformers, poles and switches (overhead and underground).</p> <p>This variance was partially offset by deferred expenditures on Switchgear replacements to mitigate the higher System Renewal expenditures listed above.</p>
System Service, Net	650	177	-473	-73%	This variance was driven by the deferral of the Tremaine TS Egress project due to slower than expected load growth in North and Downtown Burlington. BHI determined it could meet the load requirements from 2021-2025 with existing infrastructure and defer the planned investment in capital infrastructure.
General Plant, Net	2,365	2,015	-349	-15%	<p>This variance was driven by: (a) deferred expenditure for Enterprise Resource Planning (“ERP”) software replacement to the next DSP period. BHI instead elected to upgrade its existing ERP in order to address immediate business needs; and</p>

¹⁶ EB-2022-0018, p33-38

Category	2022				Variance Explanations
	Plan.	Act.	Var.		
	\$ '000		\$ '000	%	
					(b) delayed replacement of a bucket truck due to supply chain issues caused by COVID-19. This variance was partially offset by the acquisition of a parcel of land for continued use in service of BHI's electricity distribution operations.
Total Expenditure, Net	11,511	11,447	-64	-1%	This variance was driven by lower than planned capital contributions on the delayed third-party infrastructure relocation projects; and no requirement to buy back completed subdivisions paid for by developers. This was partially offset by higher contributions receive for General Service projects.
Capital Contributions	-5,899	-5,557	-341	-6%	
Total Expenditure, Gross	17,409	17,004	-405	-2%	

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Table 5.4-5: Variance Explanations - 2023 Planned Versus Actuals

Category	2023				Variance Explanations
	Plan.	Act.	Var.		
	\$ '000		\$ '000	%	
System Access, Net	5,006	4,954	-53	-1%	This variance was driven by: (a) delays in the implementation of third-party infrastructure relocation projects due to delays caused by the road authority; and (b) lower than planned customer-initiated projects (e.g., suite metering, subdivisions) due to lower demand. This variance was partially offset by unexpected capital expenditures required to address operational concerns raised by HONI related to the Burlington TS, which resulted in upgrading BHI's wholesale revenue metering equipment to meet IESO standards at the 12 supply egress locations at the TS. This project spanned two years.
System Renewal, Net	3,215	5,379	2,163	67%	This variance was driven by: (a) higher incidents of recurring underground cable faults (37 in total) leading to more replacements than planned to address system reliability performance; (b) higher "per unit" costs on underground cable replacements due to installation of new cable in conduits (existing cable was directly buried) to bring the installation up to current standards and make future repairs more cost effective; and (c) more replacements of switches (overhead and underground) than planned to mitigate the system impacts of a higher number of failures and faults.
System Service, Net	700	265	-435	-62%	This variance was driven by the deferred Tremaine TS Egress project as described in Table 5.44 above.
General Plant, Net	1,852	1,467	-385	-21%	This variance was driven by the deferred Enterprise Resource Planning (ERP) software replacement to the next DSP period. BHI instead elected to upgrade its existing ERP in order to address immediate business needs. This variance was partially offset by increased expenditures to implement Green Button and on computer server replacements due to end-of-life equipment and lease expiry.
Total Expenditure, Net	10,774	12,065	1,291	12%	This variance was driven by higher than planned capital contributions for the Metrolinx GO Corridor Electrification project, Downtown Core Development projects, General Service projects, the Fairview St. Rebuild and the Waterdown Rd. Road Widening. This was partially offset by no requirement to buy back completed subdivisions paid for developers.
Capital Contributions	-4,568	-20,342	-15,775	345%	
Total Expenditure, Gross	15,341	32,407	17,066	111%	

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Table 5.4-6: Variance Explanations - 2024 Planned Versus Actuals

Category	2024				Variance Explanations
	Plan.	Actual	Var.		
	\$ '000		\$ '000	%	
System Access, Net	4,069	7,054	2,985	73%	This variance was driven by: (a) unexpected capital expenditures to upgrade BHI's wholesale revenue metering equipment at the Burlington TS as identified in Table 5.4-5 above; (b) higher General Service expenditures driven by increased customer demand for new connections and upgrades; and (c) increased costs for meter resealing and reverification to comply with Measurement Canada regulations, as some meter groups were too small for compliance sampling, necessitating full resealing or replacement.
System Renewal, Net	3,215	5,621	2,406	75%	This variance was driven by: (a) higher incidents of recurring underground cable faults, with 23 cable faults being recorded, leading to more replacements than planned to address system reliability performance; (b) higher "per unit" costs on underground cable replacements due to installation of new cable in conduits (existing cable was directly buried) to bring the installation up to current standards and make future repairs more cost effective; (c) increased expenditures to replace faulty and leaking transformers; and (d) increased expenditures to replace a higher than planned quantity of switches and poles to address assets that had reached end-of-life.
System Service, Net	650	27	- 623	-96%	This variance was driven by: (a) the deferred Tremaine TS Egress project as described in Table 5.4-4 above; and (b) the deferral of an intelligent switch installation to mitigate some of the increase in System Renewal expenditures.
General Plant, Net	1,170	2,216	1,047	90%	The variance was driven by: (a) the implementation of a new OMS. The new OMS has improved BHI's ability to manage and respond to power outages and streamline restoration efforts which in turn improves overall grid resiliency. The new OMS will ensure timely, accurate and proactive two-way communication with customers using various communications channels which were not available options in BHI's legacy system. More details are provided in Section 5.2.1.3 above. (b) increased expenditures to replace a portion of the roof at BHI's head office, which was planned for replacement in 2026 but accelerated to 2024 due to damage from a storm which resulted in leaking.
Total Expenditure, Net	9,104	14,919	5,816	64%	
Capital Contributions	-4,005	-10,718	-6,713	168%	This variance was driven by higher than forecasted capital contribution for the Metrolinx GO Corridor Electrification and Burloak Grade Separation projects.
Total Expenditure, Gross	13,109	25,638	12,529	96%	

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Table 5.4-7: Variance Explanations - 2025 Planned Versus Budget

Category	2025				Variance Explanations
	Plan.	Budget	Var.		
	\$ '000		\$ '000	%	
System Access, Net	4,094	12,144	8,075	198%	This variance is driven by: (a) unplanned costs for relocating assets along Dundas Street due to road widening work per BHI's obligations under the Public Service Works on Highways Act. A portion of this work was delayed from earlier in the DSP period due to multiple design changes requested by the road authority; (b) higher true-up contribution payments by BHI for the Tremaine TS Connection Cost Recovery Agreement as 100% of the forecasted load on the TS did not materialize, resulting in BHI having to pay a higher capital contribution as mandated under the Transmission System Code; (c) higher General Service expenditures driven by increased customer demand for new connections and upgrades; and (d) increased expenditures for meter resealing and reverification to comply with Measurement Canada requirements, as some meter groups were too small for compliance sampling, requiring full resealing or replacement.
System Renewal, Net	3,215	4,335	1,119	35%	This variance is driven by increased expenditures to replace a higher than planned quantity of underground cable, transformers, switches and poles to address deteriorated assets at risk of failure based on their condition.
System Service, Net	700	-	-700	-100%	This variance is driven by: (a) the deferred Tremaine TS Egress project as described in Table 5.4-4 above; and (b) the deferral of an intelligent switch installation to mitigate some of the increase in System Renewal expenditures.
General Plant, Net	1,077	2,024	947	88%	This variance is primarily driven by: (a) higher than planned Computer Hardware and Software costs for computer server replacements due to end-of-life equipment, and for disaster recovery and business continuity tools; and (b) higher than planned expenditures for deferred investments in large fleet vehicles (>4,500kg) from previous years as supply chain constraints have improved.
Total Expenditure, Net	9,061	18,503	9,442	104%	This variance is driven by higher than forecasted capital contributions for the Burloak Grade Separation, the Dundas St. Road Widening project (Guelph line to Kerns Road and from Northampton Boulevard to Guelph Line) and the Metrolinx ONxpress project.
Capital Contributions	-4,005	-15,470	-11,465	286%	
Total Expenditure, Gross	13,066	33,973	20,907	160%	

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5.4.1.2 Forecast Expenditures

The following table summarizes BHI's planned capital expenditures, by investment category, over the forecast period.

Table 5.4-8: Planned Capital Expenditures by Investment Category

Category	Forecast					Total (\$ '000)	% of Total
	2026 \$ '000	2027 \$ '000	2028 \$ '000	2029 \$ '000	2030 \$ '000		
System Access, Net	14,986	12,312	9,891	12,161	11,201	60,551	55%
System Renewal, Net	6,181	6,219	6,344	6,470	6,601	31,815	29%
System Service, Net	510	624	212	325	221	1,892	2%
General Plant, Net	2,595	5,705	2,886	2,563	1,198	14,948	14%
Total Expenditure, Net	24,272	24,860	19,334	21,519	19,221	109,205	100%

5.4.1.2.1 System Access

The expenditures within the System Access category are driven by customer service requests for new connections and/or service upgrades, mandated service obligations related to system expansions and metering investments, and 3rd party infrastructure development (e.g. road widening) requiring relocation of BHI distribution infrastructure. The timing and volume of these investments are largely driven by the needs of external parties, as BHI is obligated to meet these needs pursuant to applicable acts, codes or regulations.

Forecasted volumes in this category are primarily based on information received from the City of Burlington, Halton Region, other Crown corporations (e.g. Metrolinx) and developers. BHI is forecasting a significant increase in System Access expenditures over the 2025-2027 period due to known housing developments, 3rd party relocation projects and meters approaching end-of-life and/or seal periods.

As part of its Customer Engagement activities, a detailed description (including examples) of System Access spending was provided, noting that they are mandatory investments that all Ontario distributors are required to perform. Over 91% of customers across all rate classes

recognize the importance of System Access investments, with more than 84% considering the required spending in this area appropriate.

Table 5.4-9 provides a breakdown of forecasted System Access Expenditures over the DSP horizon. A summary of each category is provided below.

Table 5.4-9: Forecast Net System Access Expenditures

Projects	Forecast					Total (\$ '000)	% of Total
	2026	2027	2028	2029	2030		
	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000		
Major Transit Station Area Development (Aldershot GO)	1,258	1,282	654	1,693	1,152	6,039	10%
Major Transit Station Area Development (Burlington GO)	985	1,048	477	2,364	1,608	6,482	11%
Major Transit Station Area Development (Appleby GO)	1,150	1,346	598	1,658	1,893	6,646	11%
Smart Meter Replacement/Reverification	2,600	2,547	2,598	775	748	9,268	15%
Suite Metering	609	587	554	631	643	3,024	5%
Meters - New Connections	408	428	451	473	497	2,257	4%
Metering Infrastructure and Systems	168	208	212	135	138	862	1%
General Service - Overhead	1,199	1,222	1,247	1,271	1,297	6,236	10%
General Service - Underground	1,683	1,716	1,751	1,783	1,821	8,756	14%
Subdivisions	750	728	743	757	773	3,751	6%
Dundas St Road Widening - (Appleby line to Northampton Boulevard)	2,666	604	-	-	-	3,270	5%
Dundas St Road Widening - (Northampton Boulevard to Guelph line)	927	-	-	-	-	927	2%
Transformers – New Connections	354	360	367	375	382	1,838	3%
Other - MTO/City/Region Projects	230	234	239	243	248	1,194	2%
Total Expenditure, Net	14,986	12,312	9,891	12,161	11,201	60,551	100%

MTSA Developments

As identified in Figure 5.4-1 below, the City of Burlington Growth Framework outlines a plan to concentrate population and housing growth in areas around the Aldershot GO, Burlington GO and Appleby GO stations in order to meet provincial housing targets. MTSA developments are driven by BHI's mandatory service obligations to connect and serve expected growth in these areas, where capacity shortfalls currently exist.

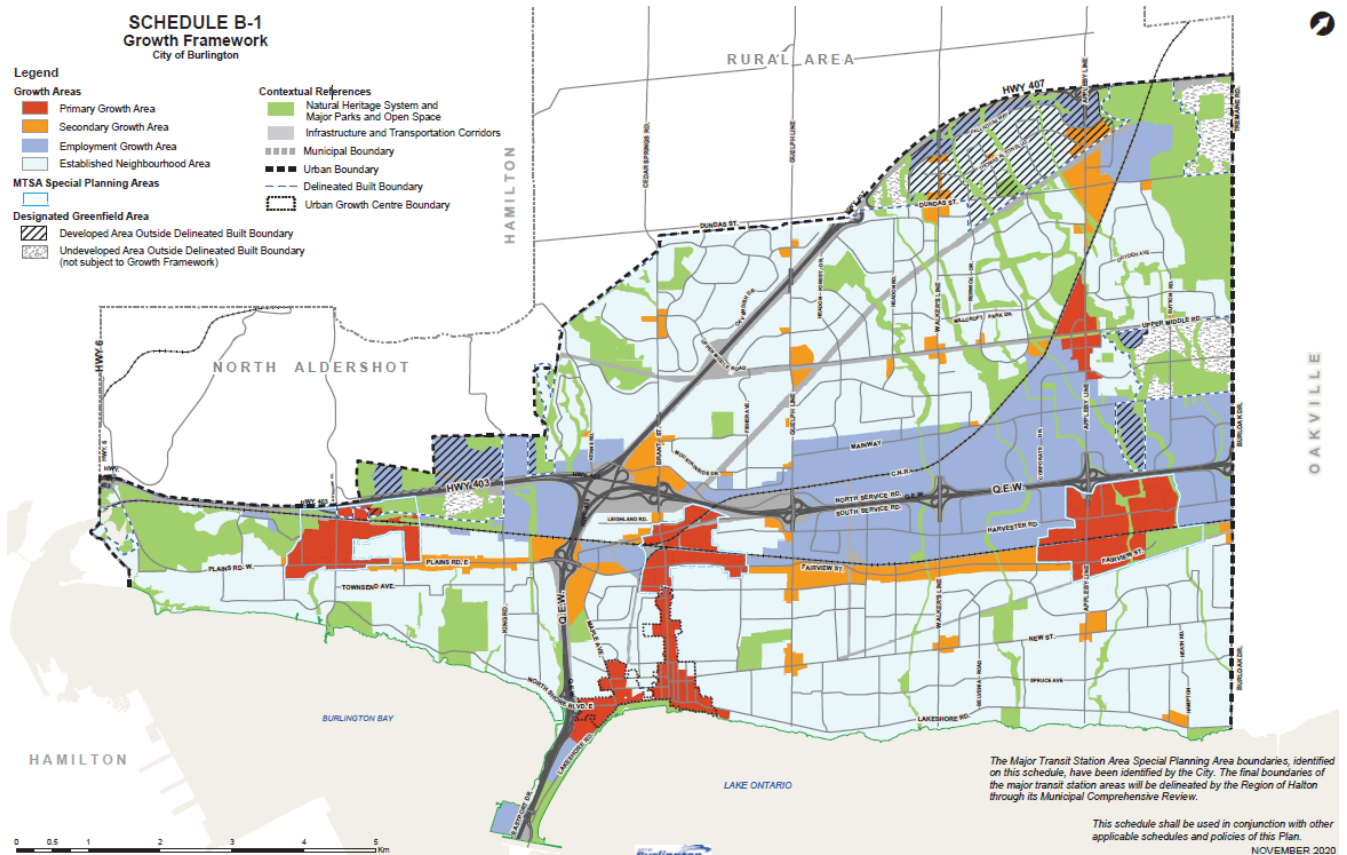
Any new development in the City of Burlington must adhere to the City's Site Plan Approval process that identifies to BHI the electrical infrastructure needs based on anticipated demand, and the timelines required to connect these developments. In the absence of existing infrastructure that can accommodate new load, BHI identifies system expansion requirements to bring capacity to these developments and reflects the associated expenditures in its capital budget.

BHI is aware of 34 multi-unit residential developments in and around MTSA zones through the City of Burlington's planning department. BHI is aware of an additional 53 multi-unit residential buildings in development outside of the three MTSA zones. These developments are in various stages of the Site Plan Approval process; however, in BHI's experience most of these developments are approved if they adhere to City policies and guidelines. BHI sources additional information directly from developers, which has identified additional residential projects above those that are identified through the Site Plan Approval process. This allows BHI to plan its system to serve future customers in these high growth and intensification areas.

Upon reviewing its existing system capacity in these areas, BHI determined that the MTSA developments are currently supplied by old 4.16kV and constrained 13.8kV and/or 27.6kV systems, which can only accommodate general load growth such as small service upgrades, new in-fill residential connections and small general service connections without impacting system performance and reliability. Due to the expected load growth in the MTSA zones, the existing infrastructure will not have the capacity to necessary to meet system needs.

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Figure 5.4-1: City of Burlington Growth Framework



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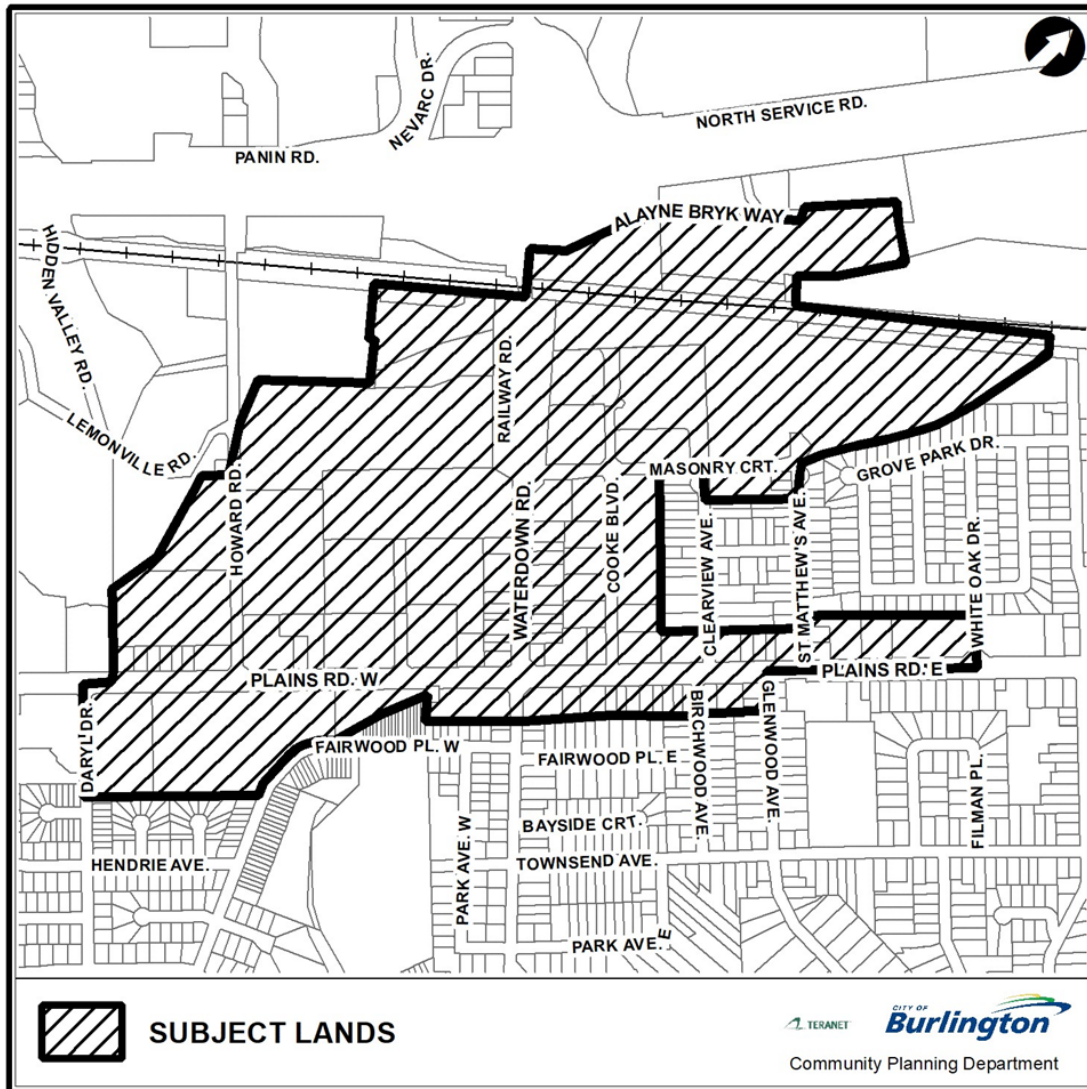
4 BHI provides additional detail on each of the three MTSAs below.

5

6 Aldershot GO MTSA:

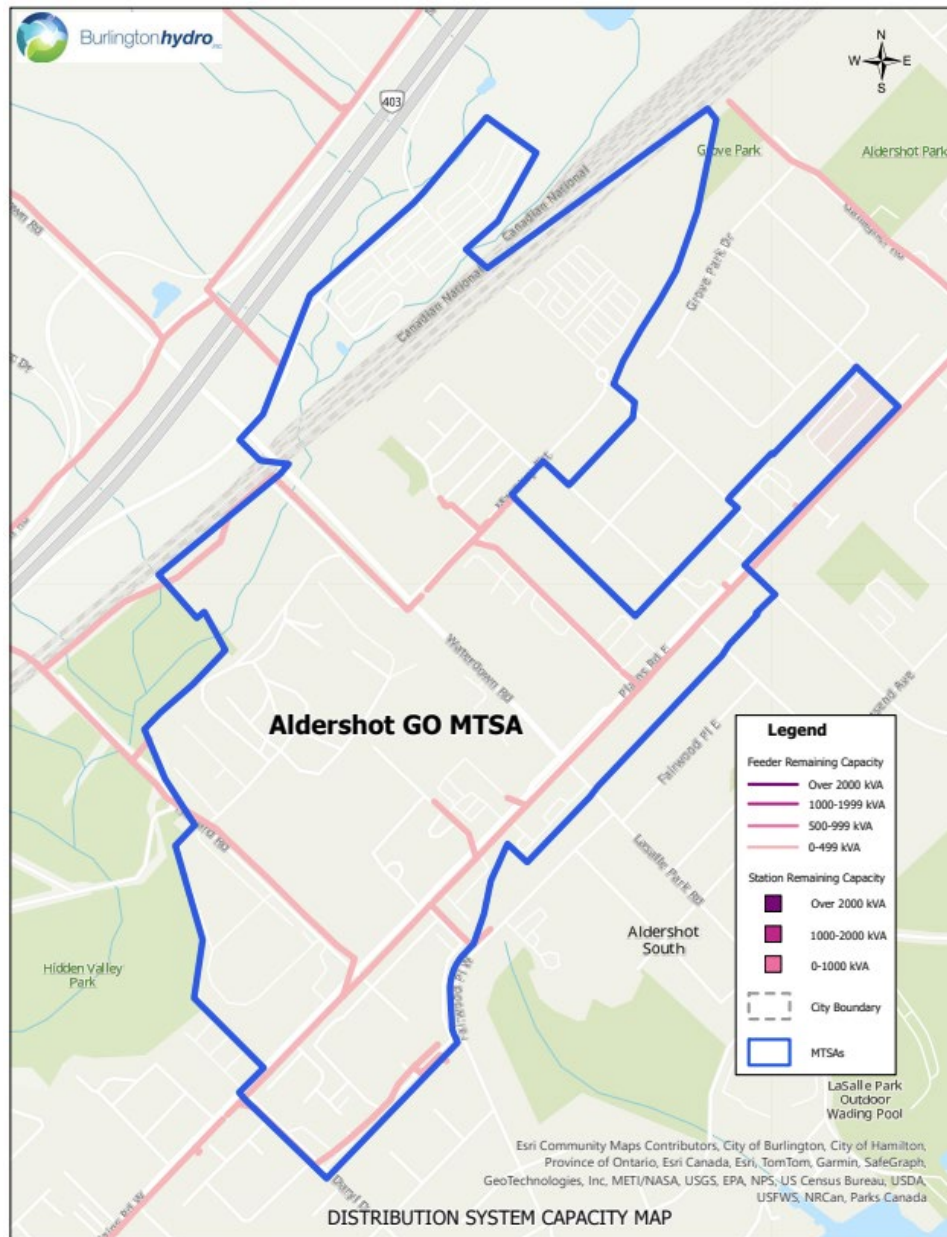
7 Figure 5.4-2 shows the Aldershot GO MTSA boundaries, which are expected to include 20 new
 8 high-rise and mid-rise buildings comprising 7,500 new units.

Figure 5.4-2: Aldershot GO MTSA



The Aldershot GO MTSA is serviced via BHI's older 4.16kV and 27.6kV systems, which can only accommodate general load growth. Only two 27.6kV feeders are available in the area (existing loop system) and there is insufficient capacity to accommodate the proposed new load, as identified in the Aldershot GO MTSA Capacity Map in Figure 5.4-3 below. The expected capacity shortfall for this MTSA is 25-30 MVA based on the expected number of buildings and units. Refer to the Material Investment Summary Document in Appendix A for more details on this investment.

Figure 5.4-3: Aldershot GO MTSA Capacity Map



Burlington GO MTSA:

Figure 5.4-4 shows the Burlington GO MTSA boundaries, which are expected to include 15 new high-rise and mid-rise buildings comprising 4,000 new units.

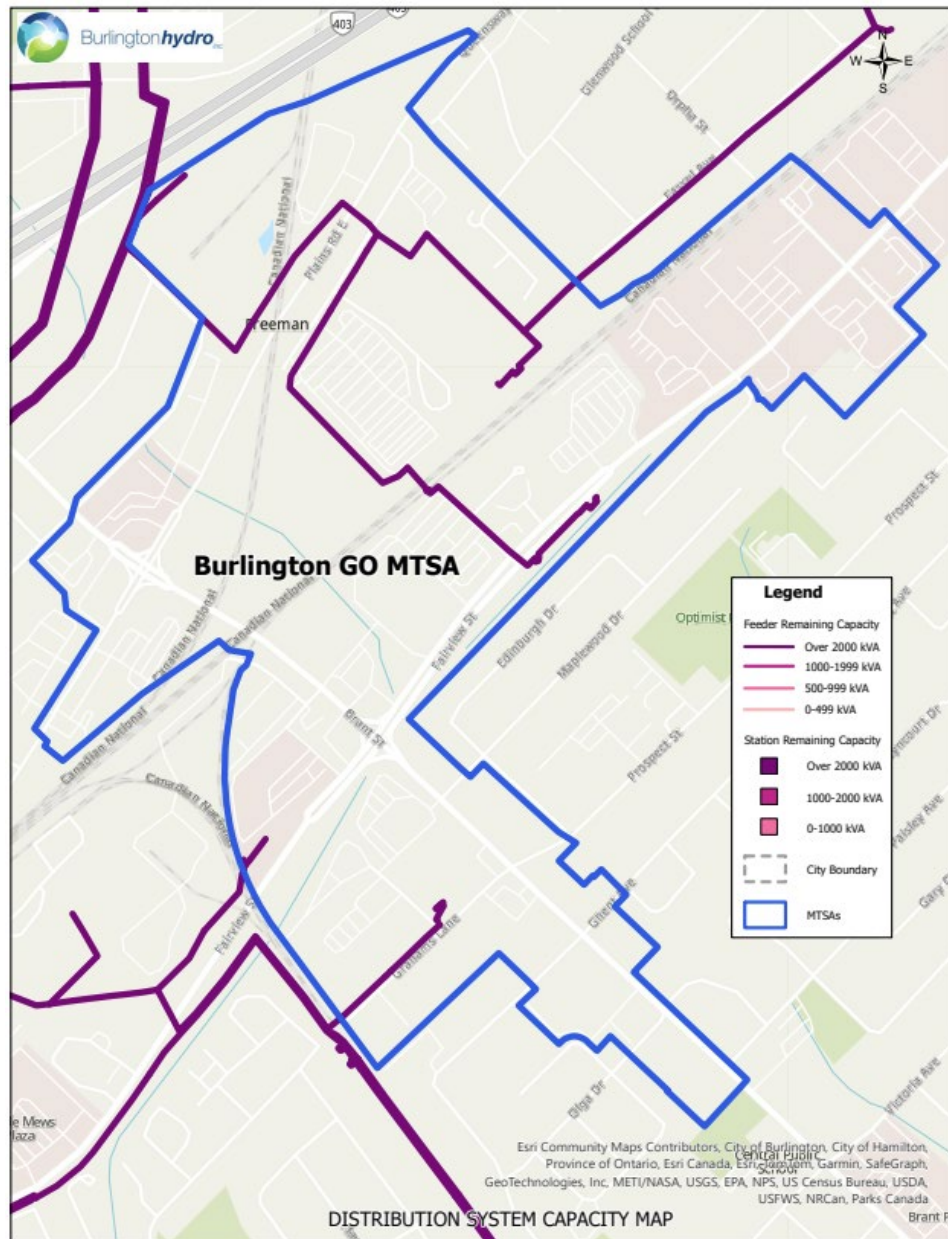
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Figure 5.4-5: Burlington GO MTSA Capacity Map



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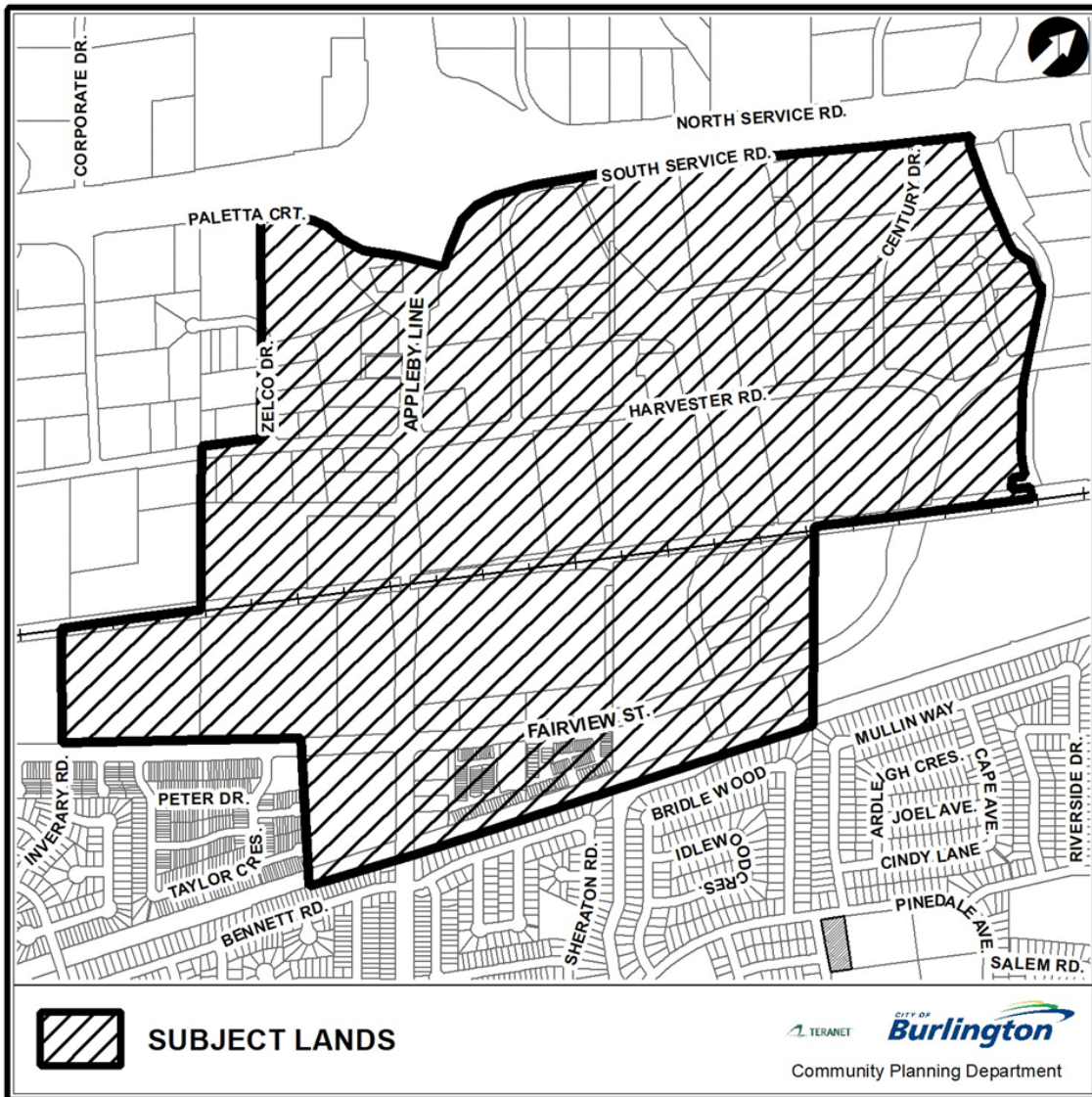
3

4 **Appleby GO MTSA:**

5 Figure 5.4-6 shows the Appleby GO MTSA boundaries, which are expected to include 68 new
 6 high-rise and mid-rise buildings comprising 20,000 new units.

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Figure 5.4-6: Appleby GO MTSA



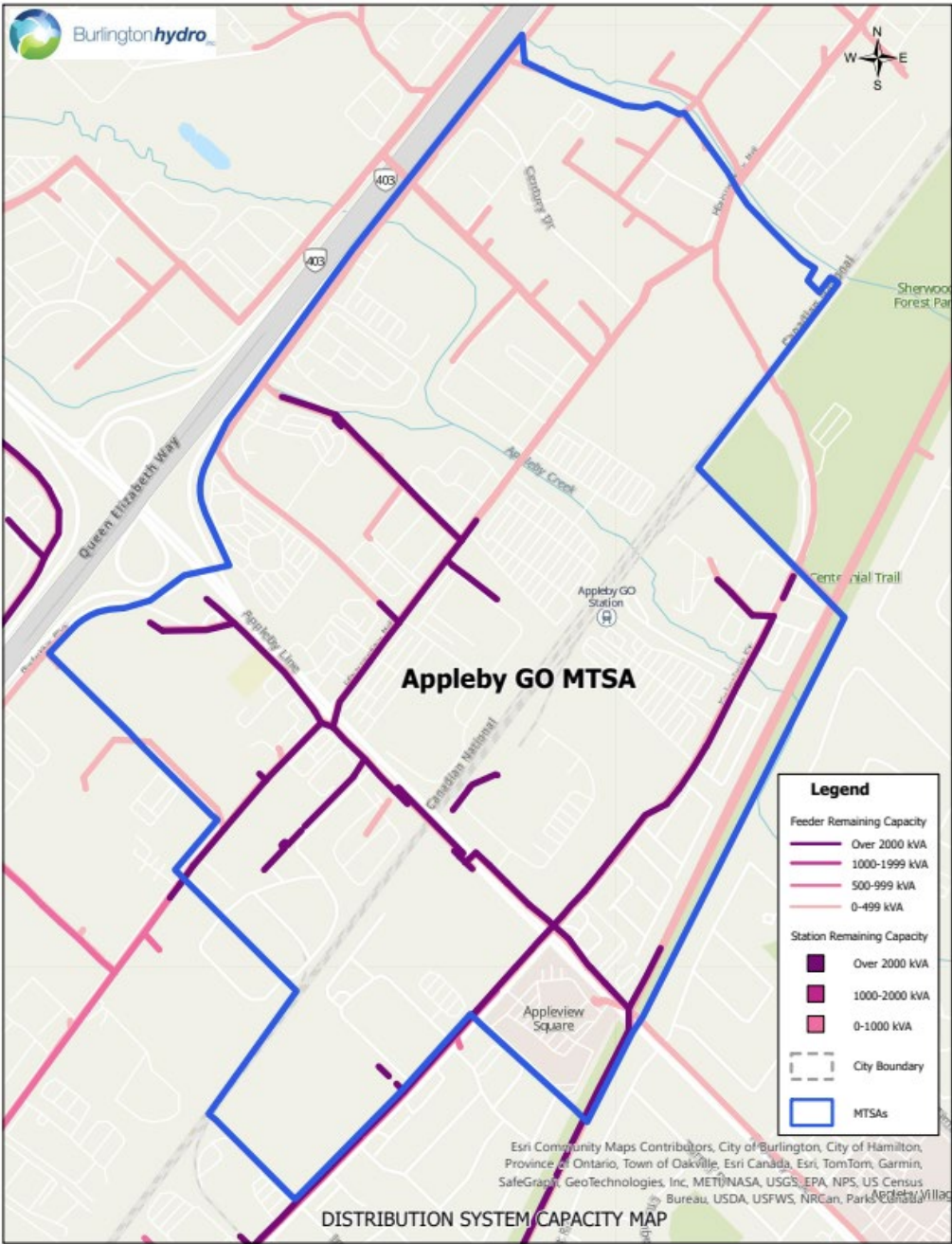
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4 Appleby GO MTSA is serviced via BHI's older 13.8kV and 27.6kV systems. Only one of the
 5 three 27.6kV feeders in the area has available capacity to support any new growth. However,
 6 there is insufficient capacity to accommodate the proposed new load, as identified in the
 7 Burlington GO MTSA Capacity Map in Figure 5.4-7 below. The expected capacity shortfall in
 8 this MTSA is 60-70 MVA based on the expected number of buildings and units. Refer to the
 9 Material Investment Summary Document in Appendix A for more details on this investment.

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Figure 5.4-7: Appleby GO MTSA Capacity Map



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Metering

Metering investments are driven by BHI's mandated service obligations under Section 28 of the Electricity Act, Section 3 of the DSC, Measurement Canada regulations and guidelines, and BHI's Conditions of Service. Metering investments are broken down into the below categories. More details are provided in the Material Investment Summary Documents in Appendix A.

Smart Meter Replacement/Reverification:

BHI has approximately 46,000 residential, commercial and Metering Inside the Settlement Timeframe ("MIST") meters that are coming due for reverification or reaching end-of-life over the DSP horizon. Meter failures (primarily the loss of the ability of the meter to communicate) have increased beyond standard operating levels, which impacts customer satisfaction (due to the requirement to estimate bills in absence of a meter read), operating efficiency (due to reactively replacing meters), and the ability of BHI to comply with regulations. BHI must either reverify or replace these meters before the seal period expires, in accordance with Measurement Canada regulations. BHI's proposed approach is to replace meters as they are due for reverification, allowing meters that have already be re-sealed to reach the end of their 2nd seal period before being replaced. This avoids premature replacements and smooths the reverification cycle over the DSP horizon and the next reverification period in 10 years. These meters are being replaced with new Alpha 4 ("A4") meters as part of BHI's strategy to transition from its current AMI 1.0 system, which started in 2008, to a next generation AMI 2.0 system to improve BHI's smart meter network and enable the smart meter 2.0 features that the new A4 meters have. This investment, in conjunction with the AMI Collector system upgrade and subsequent head-end system upgrades, will result in a fully AMI 2.0 capable system. This will facilitate the implementation of grid modernization initiatives, including those required for DER integration.

Suite Metering:

This program includes expenditures for the procurement and installation of metering equipment for multi-residential building projects. New suite metering connections comply with the requirements of the provincial AMI specification and are completed as per the requirements of the DSC. Construction delays caused by COVID-19 resulted in lower-than-expected expenditures in this program over the historical period. Program expenditures increased in 2024

and are expected to continue increasing due to the number of new multi-residential building projects expected over the DSP horizon.

Meters – New Connections:

This program includes expenditures for procurement and installation of new revenue meters for new and existing customer connections to BHI's distribution system for retail settlement and billing purposes. The scope of the program includes installation of single-phase residential meters (both load and generation), 3-phase meters for commercial and small industrial customers (GS<50 kW), 3-phase meters for large commercial and industrial customers (GS>50 kw), MIST meters and industrial customers with primary metering units. This program is driven by customer demand and forecasted expenditures are based on historical volumes and trends.

Metering Infrastructure and Systems:

This program is comprised of several subprograms outlined below:

- **Cellular Meters:** includes upgrading interval meters with cellular modems upon seal expiration, enhancing communication reliability;
- **Wholesale Meter Replacements:** replacement of aging wholesale meters and rusted cabinets at BHI delivery points as needed; and
- **Commercial Meter Installation Upgrade:** includes upgrading outdated commercial metering installations to improve reliability of meter communications.

General Service – Overhead & General Service – Underground

The General Service programs are made up of several stand-alone projects to supply services (new and upgrades) to residential, commercial, industrial and institutional customers. The primary driver of these expenditures is customer service requests for new connections or modifications to existing connections. Expenditures vary with customer/developer demand, economic activity and the type of services requested. Forecasted expenditures are based on historical trends and anticipated future developments. Expenditures in this program are mandatory due to BHI's obligation to connect new customers within its service territory under Section 28 of the Electricity Act, Section 3 of the DSC and BHI's Conditions of Service. Further details are provided in the Material Investment Summary Documents in Appendix A.

Subdivisions

This annual program consists of capital expenditures in response to requests from developers to supply new infrastructure to serve residential subdivisions (single family, semi-detached and townhouse). As noted in Section 5.2.2.2, BHI engages with subdivision developers on a regular basis in order to develop a basis for BHI's capital plans related to subdivisions. The timing of these developments is outside of BHI's control and based on the developer's project timelines. Forecasted expenditures are based on available information relating to the subdivisions (including from developer meetings and the City of Burlington's Site Plan Approval process), as well as historical trends.

BHI is currently aware of 16 subdivisions at various stages of approval, ranging from initial consultation to active construction. This translates to approximately 300 new subdivision dwelling units forecasted to be built per year during the planning horizon, although the number of units and load vary by project. Further details are provided in the Material Investment Summary Documents in Appendix A.

Dundas St. Road Widening

The 'Appleby Line to Northampton Boulevard', and 'Northampton Boulevard to Guelph Line' phases of the Dundas Street Road Widening Project are driven by 3rd party infrastructure development requirements from Halton Region, the designated road authority under the PSWHA. The project scope includes the relocation and installation of poles and transformers, the transfer of conductors to the new poles, the removal of old poles, and the relocation and installation of underground infrastructure along Dundas Street to accommodate the road widening work.

The Appleby Line to Northampton Boulevard phase requires the relocation of 83 poles, 2.6km of overhead conductors, 8 transformers and installation of 1.6km of underground cables for 3 circuits. The Northampton Boulevard to Guelph Line phase requires the relocation of 43 poles and 1.8km of overhead conductors and installation of 300m of underground cables for 3 circuits. In accordance with the PSWHA, BHI has assumed the cost of labour (including labour-saving equipment) shall be apportioned equally between the road authority and BHI.

For further details on each phase please refer to the Material Investment Summary Documents in Appendix A.

Transformers – New Connections

This category is an annual ongoing program that involves the purchase and installation of new distribution transformers to supply new developments or upgrades. Larger General Service customers require transformation at their site to convert/step-down from the distribution voltage (27.6kV, 13.8kV or 4.16kV) to a useable voltage (typically 600V), and in-turn need a higher rated transformer. BHI is forecasting between 10 and 15 transformers will be purchased and installed each year to support new and upgraded services over the 2026-2030 period. This is based on the number of connections over the historical period as well as anticipated new connections as a result of implementing the City of Burlington's growth and intensification plans, as identified above. Please refer to the Material Investment Summary Documents in Appendix A for further details.

Other - MTO/City/Region

This category includes asset relocation expenditures driven by 3rd party infrastructure development requirements from designated road authorities, including the Ministry of Transportation (MTO), the City of Burlington, and Halton Region. Work carried out under this program includes relocating distribution assets such as poles and wires, guying of single poles, transitioning services from overhead to underground, and supplementary services such as construction inspections and material handling. Noting that the quantities of assets requiring relocation and the complexity of the relocation will depend on the outcomes of the final design, BHI prepares the budget for these projects based on historical expenditures and information available from the MTO, the City and regional authorities based on their approved capital plans. The work associated with relocation of distribution assets is mandated by the PSWHA. In accordance with the PSWHA, BHI has assumed the cost of labour (including labour-saving equipment) shall be apportioned equally between the road authority and BHI.

5.4.1.2.2 System Renewal

Expenditures within the System Renewal category are driven by assets at the end of their service lives due to failure, deteriorated condition, deteriorated performance, obsolescence, or criticality (i.e. performance risk). Defective equipment has been the leading cause of customer interruptions and customer hours of interruption over the historical period. Proposed System Renewal levels are expected to help address the deteriorating trend in BHI's reliability performance and maintain the safety of the distribution system.

As outlined in BHI's planning process in Section 5.3.1, key inputs in determining proposed investment levels are the Asset Condition Assessment results, inspection data, system performance records, and customer needs and preferences. These factors help BHI determine the level of investment required over the DSP period.

Proposed System Renewal investments will address critical assets most at risk of failure or further deterioration in performance and/or condition, as identified in Figure 5.3-4 (Health Index Distribution for Each Asset Class) and Table 5.3-14 (Health Index Percentage Breakdown by Asset Class) in Section 5.3.

Another factor contributing to BHI's declining reliability is the impact of climate change in Ontario¹⁷, which BHI is addressing through increased investments that support grid hardening. As part of its Customer Engagement activities, a detailed description (including examples) of System Renewal spending was provided, noting that it includes spending to replace or refurbish deteriorated components of the distribution system so BHI can continue to provide safe and reliable power. Over 93% of customers across all rate classes recognize the importance of System Renewal investments, with more than 87% considering the proposed spending in this area appropriate.

Table 5.4-10 provides a breakdown of forecasted System Renewal expenditures over the DSP horizon. A summary of each category is provided below.

¹⁷ Vulnerability Assessment for Ontario's Electricity Distribution Sector, p9

Table 5.4-10: Forecast Net System Renewal Expenditures

Programs	Forecast					Total (\$ '000)	% of Total
	2026	2027	2028	2029	2030		
	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000		
Underground Rebuilds	2,091	2,132	2,175	2,218	2,263	10,879	34%
Pole Replacement Program	1,581	1,612	1,645	1,677	1,711	8,226	26%
Transformer Replacement	474	483	493	503	513	2,465	8%
Station Transformer Replacement Program	408	416	424	433	442	2,123	7%
Station Relays Replacement	408	416	424	433	442	2,123	7%
Switchgear Replacement Program	408	364	371	379	386	1,908	6%
Substation Circuit Breaker Replacement	255	260	265	271	276	1,327	4%
Switch Replacement Program	184	187	191	195	199	955	3%
MS Feeder Cable Replacement	199	203	207	211	215	1,035	3%
Other Substation Renewal	66	68	69	70	72	345	1%
Other System Renewal	107	78	80	81	83	429	1%
Total Expenditure, Net	6,181	6,219	6,344	6,470	6,601	31,815	100%

Underground Rebuilds

The Underground Rebuilds program manages the replacement and rejuvenation of underground primary cable in very poor and poor condition across BHI's service territory. BHI owns approximately 686 km of underground primary cables, of which 159 km (23%) are in very poor condition and 68 km (10%) are in poor condition based on BHI's ACA. The deteriorating condition of these cables increases their likelihood of failure, which has a direct impact on system reliability.

BHI's strategy is to replace underground primary cables proactively due to the high impact on outage duration if a failure occurs, as finding and replacing/repairing faulted underground primary cables is time and labour intensive. A portion of this program is also allocated to reactive underground cable replacements based on historical cable faults and the overall condition of this asset class. The table below indicates the number of cable failures recorded over the past five years.

Table 5.4-11: Number of Cable Faults per Year

2020	2021	2022	2023	2024
20	25	33	37	23

BHI utilizes an advanced, non-degrading, cable testing method to assess the robustness of older cables. Specific recommendations for future cable replacements or cable rejuvenation are provided based on observations. Cable rejuvenation primarily focuses on voids, defects, and water trees within cable insulation to fill the gaps and reduce the chance of cable faults while extending the asset life of cables, which BHI reviews on a case-by-case basis. The candidacy for cable injection (rejuvenation) is based on the results of cable testing, which identifies sections of the cables that are in poor condition but don't have certain characteristics (such as high number of splices) that would make them poor candidates for injection.

BHI replaced approximately 17 km of underground cable over the 2021-24 period, most of which was done reactively. BHI is proposing increased expenditure levels for this program in order to replace ~26 km of underground primary cables and perform cable rejuvenation on ~50 km over the 2026 to 2030 period. Increased proactive investment, including through cable rejuvenation, will allow BHI to replace or rejuvenate more lengths of underground primary cable within the DSP horizon and help address the deteriorating trend in BHI's reliability performance. Further details are provided in the Material Investment Summary Documents in Appendix A.

Pole Replacement Program

This program manages the replacement and/or reinforcement of wood poles across BHI's service territory. Approximately 1,017 (7%) of BHI's wood poles are in very poor or poor condition, with another 228 (2%) poles in fair condition which are expected to degrade toward poor or very poor condition over the DSP horizon. Many of these poles have deteriorated remaining strength, rot, and/or are out of plumb, making them at higher risk of failure. BHI does not run poles to failure due to the potential reliability and safety impact if failure occurs. Wood poles are flagged for replacement based on inspection results and the ACA, which assesses the condition of BHI's poles based on remaining strength, wood rot, mechanical defects, out of plumb, and service age.

BHI currently replaces approximately 87 poles per year but is proposing to increase the pacing of this program to mitigate the risk of asset failure and safety concerns associated with its substantial population of poles in very poor and poor condition, while balancing customer preferences to maintain reliability and pay reasonable distribution rates. BHI's proposed expenditure levels support the replacement of approximately 104 poles per year during the 2026-2030 period, with a further 50 poles per year reinforced through the use of PoleEnforcer, as a cost-effective alternative to full replacement. PoleEnforcer stabilizes poles with significant base rot, extending their lifespan and deferring replacement

Further details are provided in the Material Investment Summary Documents in Appendix A.

Transformer Replacement

This program manages the replacement of distribution transformers (pole mounted, pad mounted, vault type and submersible) supplying residential, condominium, commercial, and industrial services across BHI's service territory. Very few of BHI's distribution transformers are in poor or very poor condition based on the results of the ACA, which is consistent with BHI's last ACA (from 2020). However, distribution transformers can deteriorate from fair to poor condition quickly. BHI experienced a number of failures over the historical period and replaced 35-45 distribution transformers per year as they became inoperable, leaked oil, posed a safety risk or were no longer adequate to accommodate load in the area.

BHI's transformer replacement practices include a combination of proactive and reactive asset replacement based on inspection data. Proactive replacement is utilized where transformers have deteriorated to the point where the risk of failure is high, and the impact of that failure poses a significant safety, reliability or other risk to BHI, its customers, and or the public. Reactive replacement is utilized where transformers can fail safely posing little to no impact to customers.

Due to operational, safety and reliability reasons, all existing submersible transformers are being phased out of BHI's system at the end of their useful life and replaced with above ground pad-mount transformers.

1 BHI is proposing to maintain the current pacing of its distribution transformer replacements over
2 the DSP horizon.

3
4 Further details are provided in the Material Investment Summary Documents in Appendix A.

5
6 **Station Transformer Replacement Program**

7 This program manages the replacement of end-of-life station power transformers at BHI's MSs.
8 BHI utilizes data from monthly visual inspections, oil sample testing and loading information to
9 assess the risk of failure and prioritize station transformers for replacement. BHI does not run
10 these assets to failure as they are critical upstream assets; can cause catastrophic safety and
11 environmental impacts if they fail; require up to two years of planning lead time to replace; and
12 each replacement must be paced to maintain system loading/balancing and backup capability.
13 Station transformers are regularly tested according to the manufacturer's recommendation
14 which provides a snapshot on the health of the unit and identifies any potential weak spots that
15 can lead to pre-mature failure. Table 5.3-16 in Section 5.3.3.2 provides a summary of the
16 inspection and testing schedule for station assets including transformers. BHI identifies
17 candidates for replacement after all remedial and rehabilitation options have been exhausted.
18 Remediation options include a complete re-cycling of the transformer oil, rust removal,
19 component replacement, and re-painting.

20
21 BHI is proposing to maintain the pacing of its station transformer replacements to avoid a
22 backlog. BHI has 44 station transformers and must pace replacements over a longer time
23 horizon to avoid multiple transformers being out of service at the same time which would cause
24 significant reliability issues for customers and system loading/balancing and backup capability
25 challenges for BHI.

26
27 BHI is actively monitoring four station transformers who's dissolved gas analysis ("DGA") results
28 have indicated elevated levels of certain gases and/or probable active gassing. BHI relies on the
29 DGA test results as a leading indicator of the internal state/health of the transformer. Based on
30 ongoing monitoring and test results, BHI will determine which transformers must be prioritized
31 for replacements.

Further details are provided in the Material Investment Summary Documents in Appendix A.

Station Relays Replacement Program

This program manages the replacement of end-of-life station feeder protection relays at BHI's MSs. Feeder protection relays are an asset used in substation operations to trip a circuit breaker when a fault is detected. Legacy relays are electromechanical and require regular calibration. By the end of 2024, 85% of BHI's 127 station protection relays were technically obsolete electromechanical and old electronic relays, which do not permit event reporting, fault diagnostics, or power flow observability.

To advance BHI's grid modernization efforts, end-of-life relays will be replaced with new SCADA-compliant units. This enhances BHI's ability to detect and isolate interruptions, improving operational efficiency, safety, and reliability. These capabilities allow for real-time monitoring, fault detection, and remote control, reducing the need for manual intervention and minimizing the duration of outages.

BHI plans to replace 8 station relays annually, totaling 40 over the next rate period. This is approximately double the pacing of the historical period, driven by failure risk (55% or 71 units in poor or very poor condition) and technical obsolescence (85% or 108 units obsolete).

Further details are provided in the Material Investment Summary Documents in Appendix A.

Switchgear Replacement Program

This program manages the replacement of end-of-life station primary switchgear at BHI's MSs. BHI uses monthly visual inspection and regular preventive maintenance testing and inspection data to accurately assess the condition of these switchgear and inform its investment decisions. BHI does not run these assets to failure as they are critical upstream assets, and the specialized nature of this equipment results in long lead times.

A station primary switchgear failure during operation poses a serious safety risk to BHI staff due to the exposure to live parts and potential for arc flashing. New station primary switchgear units are not live-front and can be operated remotely, eliminating this safety risk. Proactively replacing

1 switchgears will reduce the number of live-front units in poor and very poor condition, reducing
2 the probability of failure during operation, and mitigating the associated safety risks.

3
4 BHI plans to replace one to two primary station switchgear annually over the DSP period. This is
5 approximately double the pacing of the historical period, driven by their deteriorated condition
6 (45% or 20 units are in poor or very poor condition) which will avoid asset failures and the
7 negative reliability and safety impacts they can cause.

8
9 Further details are provided in the Material Investment Summary Documents in Appendix A.

10 11 **Substation Circuit Breaker Replacements**

12 This program manages the replacement of end-of-life station circuit breakers at BHI's MSs. BHI
13 considers technical and functional obsolescence in addition to monthly inspection and
14 preventive maintenance data in assessing the volume and priority of circuit breaker
15 replacements. BHI does not run these assets to failure as they are critical upstream assets, and
16 the specialized nature of this equipment results in long lead times.

17
18 BHI owns 132 circuit breakers, of which 106 (80%) are operational air-magnetic breakers that
19 are functionally obsolete. As such, they cannot be integrated with current SCADA and network
20 technologies limiting BHI's ability to remotely operate these units, integrate them with other
21 devices or ADMS, or collect relevant data from these devices. Additionally, compatible spare
22 parts are not available in the event of failure as these assets are no longer supported by the
23 original equipment manufacturer.

24 BHI plans to replace four circuit breakers annually over the DSP period. This is approximately
25 double the pacing of the historical period, driven by the number of obsolete units, the criticality
26 of these units, and the lead time in obtaining this specialized equipment.

27
28 Further details are provided in the Material Investment Summary Documents in Appendix A.

1 **Switch Replacement Program**

2 This program manages the replacement of end-of-life overhead inline switches and
3 underground switching cubicles. Based on the ACA results, 2,251 (56%) OH inline switches are
4 in 'fair' condition. Although BHI carries out a switch maintenance program and has no switches
5 in poor or very poor condition, it has historically replaced ~20 switches per year reactively plus
6 an additional 10-15 proactively due to failure risk. The deterioration rate of switches can be
7 influenced by factors such as voltage, usage patterns, environmental conditions as well as
8 maintenance and upkeep. Based on historical trends, BHI plans to proactively replace 20 OH
9 inline switches and two switching cubicles per year to maintain system operations and reliability.

10
11 **MS Feeder Cable Replacement**

12 As part of the MS Feeder Cable Replacement program, BHI is proposing to replace an average
13 of 1.7 km of MS feeder cable each year over the DSP period. BHI is proposing to continue its
14 proactive MS Feeder Cable Replacement Program by replacing cables that are currently, or
15 expected to deteriorate into, poor or very poor condition over the future rate period.

16 BHI owns approximately 180 segments of MS feeder cables, which total 23 km. MS feeder
17 cables extend from BHI's MSs and connect to primary feeders. Approximately 3.1 km of these
18 cables are in poor condition and 11.1 km are in fair condition, based on the ACA.

19
20 BHI undertakes a proactive replacement approach for these assets as they are critical upstream
21 assets with significant reliability impacts for a high number of customers if a failure occurs. BHI's
22 proactive replacement program allows for cables in the worst condition to be replaced before
23 failing and decreases the backlog of cables to be replaced during the next DSP period.

Other Substation Renewal & Other System Renewal

The Other Substation Renewal program includes small investments in Remote Terminal Units (RTUs), batteries, battery chargers and transducers, to account for the end-of-life replacement of these components based on condition assessment. These investments are based on historical expenditures and performance. Other System Renewal includes investments such as primary metering tank replacements based on condition assessment.

5.4.1.2.3 System Service

System Service investments are modifications to BHI's distribution system designed to enhance its capability to meet current and future operational objectives, such as improving system efficiency, enabling better integration of DERs, and increasing grid flexibility.

These investments are driven by the need to address various constraints, such as aging infrastructure, limited capacity to support growing and concentrated loads, and the increasing demand for grid modernization to accommodate emerging technologies and evolving customer needs. In addition, these investments support BHI's efforts to modernize and increase the resilience of its grid, as well as facilitate operational efficiencies. Grid modernization and building grid resiliency are policy goals which have been prioritized by the Province.¹⁸

As part of its Customer Engagement activities, a detailed description (including examples) of System Service spending was provided, noting that it includes spending to modernize and automate the distribution system to ensure that it meets customers' changing needs and addresses anticipated future growth within the City of Burlington. Over 92% of customers across all rate classes recognize the importance of System Service investments, with more than 87% considering the spending in this area appropriate.

Table 5.4-12 provides a breakdown of forecasted System Service expenditures over the DSP horizon. A summary of each category is provided below.

¹⁸ [Ontario's Affordable Energy Future: The Pressing Case for More Power](#) – October 2024.

Table 5.4-12: Forecast Net System Service Expenditures

Programs	Forecast					Total (\$ '000)	% of Total
	2026	2027	2028	2029	2030		
	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000		
Intelligent Switches	204	312	212	325	221	1,274	67%
AMI Collector System Conversion/Upgrade	306	312	-	-	-	618	33%
Total Expenditure, Net	510	624	212	325	221	1,892	100%

Intelligent Switches

The Intelligent Switch program includes the installation of overhead and underground distribution automated switches. Automated distribution switches automatically sectionalize a feeder and isolate the section of the feeder impacted by an outage, eliminating the need to dispatch crews to certain outages by performing the switching remotely. This minimizes the scope of unplanned outages and results in fewer customers being impacted by a permanent or momentary outage.

BHI intends to continue phasing in intelligent switches by strategically locating these switches along feeders that are more prone to interruptions, including with regard to their length, vulnerable lines (e.g., those with a documented history of poor reliability), as well as those serving customers critically sensitive to interruption duration (e.g., hospitals or data centers). BHI intends to install two intelligent switches each year over the DSP period as part of its strategy of achieving a network of remote-operable switchgears capable of integrating into advanced restoration schemes like the Intelliteam SG Automatic Restoration System. Intelligent switches are central to BHI's grid modernization efforts as these technologies can integrate seamlessly with ADMS functionality, automating routine grid operations and expediting system restoration during abnormal conditions.

Further details are provided in the Material Investment Summary Documents in Appendix A.

AMI Collector System Conversion/Upgrade

The AMI Collector System Conversion/Upgrade program entails replacing BHI's population of approximately 110 collectors and repeaters which are used to store and send meter data over to the headend system. This replacement program is inherently tied to the replacement of smart meters as the upgrade is necessary to maintain communication with the new metering units. The replacement is required as BHI's existing collectors are approaching end of life – a number of which have been identified for replacement due to rusting enclosures or failure of waterproof seals, or have failed due to component obsolescence resulting in lost meter data. BHI's existing collectors have been in service since 2009 and the vendor has ended production of the original style of collectors including spare parts. Furthermore, all collectors must use the same updated technology for the communications network to benefit from the full functionality of the next generation of meters. BHI is therefore proposing to replace all of its collectors and repeaters over the 2026-27 period.

Further details are provided in the Material Investment Summary Documents in Appendix A.

5.4.1.2.4 General Plant

Expenditures in the General Plant category are primarily driven by the need to modify, replace, or add to non-distribution system assets that support BHI's 24/7 operations and are necessary to deliver safe and reliable distribution service. BHI is forecasting a slight increase in expenditures relative to the historical period, not including the 2027 impact of BHI's proposed replacement of its SCADA system and implementation of an ADMS. Increased expenditures are primarily driven more large fleet vehicles being replaced over the DSP horizon compared to the historical period, as described further below and in the Material Investment Summary Documents in Appendix A.

As part of its Customer Engagement activities, a detailed description of General Plant spending was provided, noting that it includes spending on buildings; tools and equipment; the truck fleet; and electronic devices and software used to support day-to-day operations of the system. Over 88% of customers across all rate classes recognize the importance of General Plant investments, with more than 84% considering the spending in this area appropriate.

Table 5.4-13 provides a breakdown of forecasted General Plant expenditures over the DSP horizon. A summary of each category is provided below.

Table 5.4-13: Forecast Net General Plant Expenditures

Programs	Forecast					Total (\$ '000)	% of Total
	2026	2027	2028	2029	2030		
	\$ '000	\$ '000	\$ '000	\$ '000	\$ '000		
Fleet	1,031	911	745	685	267	3,639	24%
Buildings	871	545	584	335	298	2,633	18%
SCADA Replacement/ADMS acquisition	-	3,640	-	-	-	3,640	24%
SCADA / GIS / AMI / OMS (on-going)	82	83	85	87	88	425	3%
Other Computer Hardware & Software	485	382	283	251	405	1,806	12%
Business Applications - ERP Enhancements / Upgrades	24	25	25	26	26	127	1%
Business Applications - ERP Replacement	-	-	1,061	1,082	-	2,143	14%
CIS Capital (on-going)	61	52	53	54	55	276	2%
Office Equipment	20	47	29	22	35	153	1%
Tools	20	21	21	22	22	106	1%
Total Expenditure, Net	2,594	5,705	2,886	2,563	1,198	14,948	100%

Fleet

The Fleet program includes investments in BHI's passenger vehicles, bucket trucks and trailers. BHI's fleet are critical assets in supporting the safe and efficient delivery of BHI's capital projects and emergency response efforts. Forecasted expenditures reflect the replacement of vehicles that are currently at, or beyond, or expected to reach the end of, their service lives; BHI is not planning to increase the size of its fleet as part of this Application. The following table outlines the vehicles that will be replaced during the forecast period:

Table 5.4-14: Vehicle Replacements during Forecast Period

Vehicle Classification	Vehicle Type	2026	2027	2028	2029	2030	Total
Rolling Stock (>4500 kg)	Single Bucket truck	1	1				2
	Dump Truck	1					1
	Flatbed Truck		1				1
	Radial Boom Derrick			1	1		2
	Cable Reel Trailer		1		1		2
	Equipment			1	1		2
	Single Bucket truck - Repair	1					1
Rolling Stock (>4500 kg) - Total		3	3	2	3	0	11
Rolling Stock (<4500 kg)	Pickup Truck	2	1				3
	Van	2	1				3
	Trucks/Vans/Cars		2	3	2	4	11
Rolling Stock (<4500 kg) - Total		4	4	3	2	4	17
Total		7	7	5	5	4	28

As indicated in Table 5.4-14, 11 of the 28 assets that BHI proposes to replace during the future rate period are for larger equipment (>4,500kg) such as bucket trucks, which are significantly more expensive than smaller equipment (<4,500kg) like pickup trucks. The increased expenditures over the DSP period compared to the historical period is attributed to the type of vehicles requiring replacement. BHI replaced two large vehicles (>4500kg) and 27 small vehicles (<4500kg) from 2021-2025. BHI witnessed significant delays in purchasing large vehicles during the historical period due to extended lead times related to COVID-19, and it is shifting its focus to replacing these vehicles over the DSP horizon due to their deteriorated condition.

BHI assesses whether to replace its fleet in accordance with the framework provided in its Fleet Management Plan attached as Appendix L to this DSP. The Fleet Management Plan identifies the condition criteria and vehicle attributes used to form an objective basis for decision making with respect to fleet replacement.

Fleet is evaluated on a regular basis using a Fleet Evaluation Matrix attached as Appendix M to this DSP. The results are used to identify, prioritize and pace vehicle replacements based on the below matrix score categories from the Fleet Management Plan.

Figure 5.4-8: Matrix Score Categories from Fleet Management Plan

Matrix Score categories

Score	Status
Under 18	Excellent - Continue to Monitor
18-22	Good - Continue to Monitor
23-27	Qualifies for Replacement - Schedule Detailed Evaluation
over 27	Needs Immediate Consideration - Perform Detailed Evaluation

The following large vehicles are identified for replacement during the forecast period:

- Truck 23 – Matrix score of 37 – 46 foot single bucket truck used daily for emergency restoration and service connections
- Truck 24 – Matrix score of 36 – 46 foot single bucket truck used daily for emergency restoration and service connections
- Truck 32 – Matrix score of 36 – F350 - a multi-use vehicle used to support operations in a variety of ways
- Truck 30 – Matrix score of 30 – F650 dump truck, a critical vehicle for operations to move materials (stone, screenings, dirt, transformers) in both emergency and capital projects
- Truck 35 – Matrix score of 30 – Radial Boom Derrick truck, a critical asset used for material handling, pole transportation, hole augering, material lifting, and pole setting.

These assets are critical for BHI to maintain its operations. In 2024, Trucks 23 and 24 were out of service for a combined eight weeks to address maintenance and repair issues. Out of service vehicles place undue strain on the operations group as it endeavors to keep appointments and maintain service levels for customers.

Further details are provided in the Material Investment Summary Documents in Appendix A.

Buildings

Building expenditures consist of general investments and improvements to building and equipment at BHI's offices, including yards and garages that house equipment; general upgrade of the parking lot; and [REDACTED]

[REDACTED].

Investments under this program vary from year to year based on specific needs identified during the planning process. BHI employs preventative inspections and maintenance to monitor its building assets, including plumbing, air systems, garage doors, windows, security systems, gates, generators, and heating/cooling systems. This proactive approach identifies and prioritizes repairs, replacements, and upgrades needed over the planning horizon. To help further inform and optimize BHI's building investment plan, BHI conducts third-party assessments to provide observations and recommendations on the physical condition of BHI's roof and building, attached as Appendix N and Appendix O to this DSP, respectively.

Average expenditures in this category were approximately \$330,000 over the historical period, which allowed BHI to address immediate needs for maintaining its buildings, premises, and equipment. However, this pace of spending is neither adequate or sustainable for addressing the needs of BHI's aging facilities, and inaction could negatively impact BHI's operations.

Possible consequences include risks to employee safety, business operation disruption, and more expensive corrective actions in the future. To mitigate these risks, BHI has proposed a higher level of forecasted expenditures based on specific needs identified during the planning process, to ensure safe and reliable work facilities.

The drivers of the increased expenditures in the 2026 test year include:

- Head Office building repairs and upgrades including roofing replacement, brickwork, foundation repairs, windows and general repairs throughout the building.
 - A large section of the roof was replaced in 2024 due to damage sustained from a storm that resulted in a leak. These repairs have been paced into 2025 and 2026 to ensure business operations continuity and to spread the significant replacement costs over multiple years.
 - Foundation repairs to address leaks as well as enhancements to drainage systems. If the foundation is not promptly repaired, the resulting water infiltration can interfere with BHI's network and control system.

- Renovations and upgrades include the addition of new offices and workstations to accommodate new Full-Time Equivalent (“FTE”) requirements. Further details on the rationale for the increase in FTEs is provided in Section 4.3.1.1 of Exhibit 4.

[REDACTED]

- Asphalt resurfacing and repairs to main head office parking lot (~37,000sqft), which serves as the main parking area for employees and contractors. As noted in the building condition assessment, the north parking lot exhibited cracking, potholes, and localized settlement and recommended 50% of the area be replaced by 2025 (within 2-4 years of the report, which was completed in 2021) and the remainder within the subsequent 1-6 years. Additionally, BHI has a smaller visitor parking lot (~3,500sqft) that it plans on expanding to 20,000sqft to accommodate visitors, contractors, and additional employee parking needs, which aligns with BHI’s newly implemented visitor policy that requires the use of the south entrance to maintain safety and security.
- HVAC System: BHI has approximately 40 HVAC units, comprised of various small and medium sized units and one large unit (condenser and air handler). These units are at, or approaching, the end of their useful lives and are considered to be at high risk of failure. BHI is proposing to increase the pace of replacement from 1 per year to 2-3 per year over the DSP period. The proposed pacing appropriately smooths out the rate impact and ensures that BHI has the capacity to carry out replacement work.

Further details are provided in the Material Investment Summary Documents in Appendix A.

SCADA Replacement and ADMS Acquisition

This project is to replace BHI's aging SCADA system and implement a fully integrated ADMS. BHI's existing SCADA system, while historically adequate for monitoring and control in a traditional grid setup, faces several limitations in the context of modern grid demands and evolving industry standards. The current system lacks enhanced functionality that modern SCADA systems can deliver when integrated with OMSs, such as automated FLISR, Voltage and Reactive Power Optimization, and real-time monitoring and analytics.

Building these capabilities will:

- Help reduce outage frequency and duration through advanced fault detection and automated restoration systems;
- Provide real-time updates and enhance communication with customers during power outages;
- Support more granular reporting (e.g. feeder-level) and enhanced performance targets (enhanced approach to setting reliability performance targets) set by the OEB related to reliability;
- Prepare the grid for future requirements, including the integration of renewable energy sources, EVs, and advanced customer energy management solutions including through alternative energy business models such as DSO capabilities;
- Automate and optimize grid operations to reduce energy losses and enhance operational efficiency; and
- Enable BHI to more effectively evaluate non-wires solutions (e.g. demand response programs, energy storage) to address system needs.

The estimated expenditure for this project is \$3.64M with an expected in-service date of December 31, 2027. This does not include costs associated with integrating with existing BHI applications or the cost of field hardware, as BHI will be in a better position to accurately forecast these costs as part of the project preparation phase.

Further details are provided in the Material Investment Summary Documents in Appendix A of this DSP and the business case filed as Appendix B of Exhibit 2 in this Application.

Other Technology Hardware & Software

This program addresses investment needs for Information Technology/Operational Technology (“IT/OT”) hardware and software including cyber security, risk management, privacy, compliance and data governance. These investments are critical to ensuring operational resilience and safeguarding BHI’s assets, data, information, systems and hosting facilities. Further, modernizing IT infrastructure and strengthening cybersecurity defenses enables the organization to continue to meet current business demands, protect data, and prepare for future growth.

Forecasted expenditures are consistent with the historical period and address the following needs:

- Continued investment in cybersecurity tools and platforms to enhance cyber security readiness in accordance with the Ontario Cyber Security Framework¹⁹ (OCSF) and the OEB’s Ontario Cyber Security Standard²⁰;
- Disaster Recovery and Business Continuity investments to mitigate the impact of unplanned business interruption;
- IT/OT investments to modernize network and server infrastructure and end user technology (personal computers, productivity and collaboration tools) to ensure consistent performance and scalability through increasing computing requirements; and
- Digital transformation initiatives including Artificial Intelligence (“AI”) and advanced analytics to support process automation and data-driven real-time decision making.

Further details are provided in the Material Investment Summary Documents in Appendix A.

¹⁹ Ontario Cyber Security Framework (OCSF) v 1.1, December 7, 2023

²⁰ Ontario Cyber Security Standard, March 27, 2024

Business Applications – Enterprise Resource Planning (“ERP”) Replacement /

Enhancements / Upgrades

Expenditures in this category support minor enhancements and upgrades to BHI’s legacy ERP system from 2026-2028, a planned ERP replacement in 2028-2029, and ongoing ERP enhancements in 2030. With a rapidly evolving business environment, it is crucial for BHI to have robust and efficient systems in place to manage its operations. The current ERP system has been able to meet most of the business requirements over the past 20 years, but it is now outdated and unable to meet the growing demands of the business.

The Material Investment Summary Document in Appendix A outlines the need to replace BHI’s existing ERP system with a more advanced and scalable solution that will address the changing business requirements associated with evolving regulatory, compliance, automation and information security landscapes.

The new ERP system, which will encompass enhanced accounting, procurement, project management, risk management, compliance, and supply chain modules, is expected to improve user productivity through increased functionality and features. The new ERP system is also expected to deliver operational efficiencies through streamlined business processes, automated reporting, and reduced risk of input errors. More efficient work order management will also help expedite field-based services to customers.

CIS Capital

The CIS Capital program includes expenditures for enhancements and new functionality for BHI’s CIS, including integration with relevant systems to improve day-to-day operations and better serve customers. BHI’s CIS is a critical system which (i) facilitates the issuance of timely and accurate bills to customers, process payments and manage billing cycles, (ii) stores and manages customer data and processes service requests (e.g. new connections, disconnections and repairs); and (iii) interfaces with smart meters and collectors to collect and process consumption data to calculate usage, verify billing accuracy and offer usage insights to customers.

Office Equipment and Tools

This category includes investments in various tools and small equipment necessary to carry out the 24/7 operations and maintenance activities of the engineering, operations, and stores departments. BHI strives to replace tools with electric tools (e.g., battery operated chainsaws, presses, and other power tools) to limit the use of two stroke motors and exhaust gas emissions, where possible. Office equipment primarily relates to the purchase of ergonomic equipment and other office furniture so BHI staff can carry out their jobs safely and effectively.

5.4.1.2.5 Investments with Project Lifecycle Greater than One Year

Projects spanning multiple years are capitalized as specific components enter service (i.e. become “used and useful”). Any components under construction remain in WIP until they are placed in service. Therefore, partial capitalization may occur in stages depending on the nature of the project.

5.4.1.3 Comparison of Forecast and Historical Expenditures

A comparison of BHI’s capital expenditures in the DSP’s forecast period as compared to the historical period is provided in the following subsections.

5.4.1.3.1 Overall Capital Expenditures

The overall net capital expenditure trends over the 2021 to 2030 period are shown in Figure 5.4-9. In the 2026-2030 rate period, the total average capital expenditures are expected to be approximately 47% higher than the average in the current rate period. As depicted in Figure 5.4-10 below, this increase is primarily driven by investments in the following categories:

- **System Access:** to replace BHI’s end-of-life meter population in accordance with Measurement Canada regulations, and to connect and serve growth and population intensification in and around MTSAs resulting from provincial policy and municipal urban planning requirements;
- **System Renewal:** to replace or refurbish deteriorating assets such as underground cables and poles, the failure rates for which have increased in the current rate period resulting in deteriorating reliability performance. This is in line with the overall objective

of maintaining reliability and addressing system hardening in light of increasing climate related events which have been impacting BHI's system; and

- **General Plant:** to replace BHI's deteriorating fleet assets, primarily bucket trucks that have reached the end of their service lives; to perform necessary structural work on BHI's head office facilities; and to upgrade specific IT/OT infrastructure to enable grid modernization, improve grid resilience, and drive long-term operational efficiencies.

Figure 5.4-9: Overall Expenditures Comparison

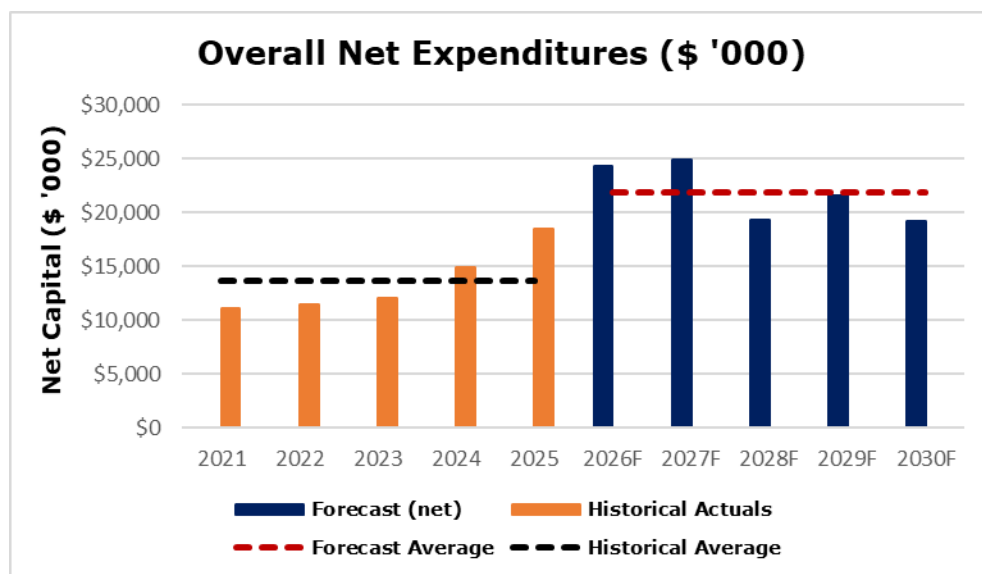
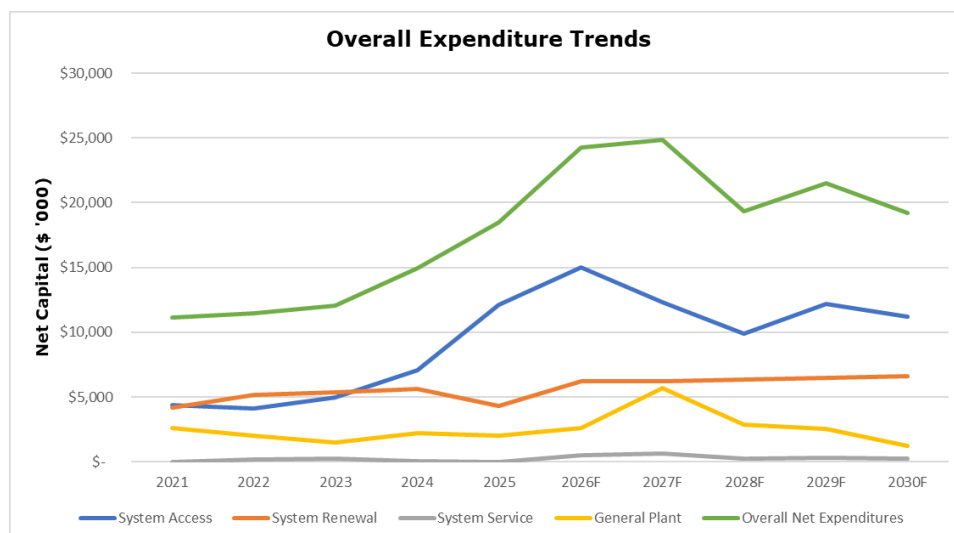


Figure 5.4-10: Overall Expenditure Trends



Capital expenditures in 2026 and 2027 are higher than prior years due to a significant increase in mandatory System Access projects, in particular, replacing end-of-life smart meters and expansions to connect customers in and around MTSAs and the SCADA Replacement and ADMS Acquisition project.

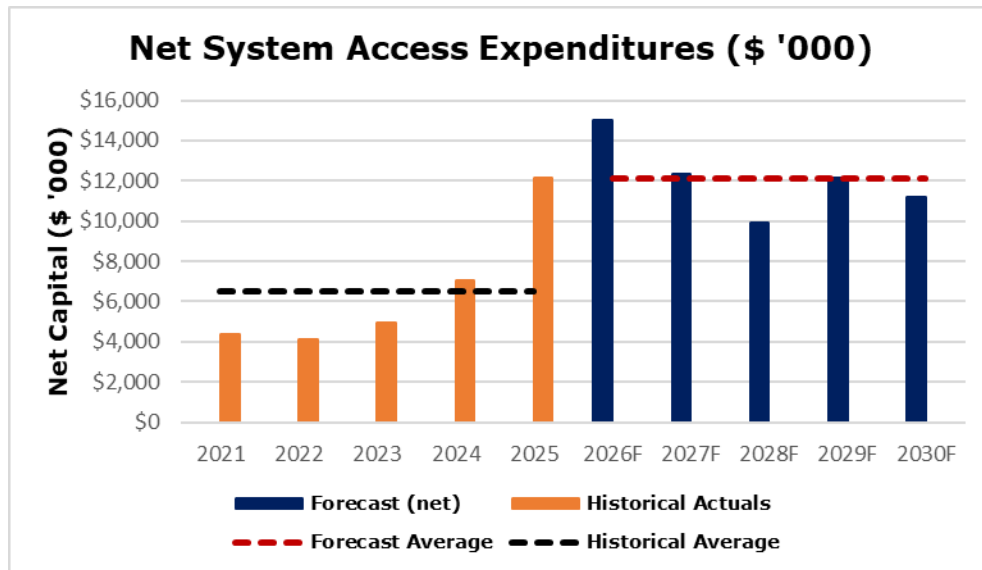
In the sections that follow, BHI provides a summary of key programs and investment priorities that are driving the planned capital expenditures increases in each of these categories for the future period.

5.4.1.3.2 System Access

As shown in Figure 5.4-11, the forecast average expenditures for 2026-2030 for System Access are \$5.6M or 86% higher than the average expenditures during the current rate period. This increase is primarily attributed to:

- **Meter replacements:** BHI has 46,000 meters at the end of their service lives that are exhibiting increased failure rates. Investments in meter replacement, including a transition to a next generation Advanced Meter Infrastructure 2.0 system, will mitigate the risk of billing errors, facilitate compliance with Measurement Canada regulations, and provide BHI with enhanced data and functionality to advance grid modernization efforts; and
- **Enabling growth:** Capacity investments to connect and be ready to serve population and housing growth expected in MTSAs, driven by provincial housing targets and the City of Burlington and Halton Region's urban planning priorities.

Figure 5.4-11: Net System Access Expenditures Comparison

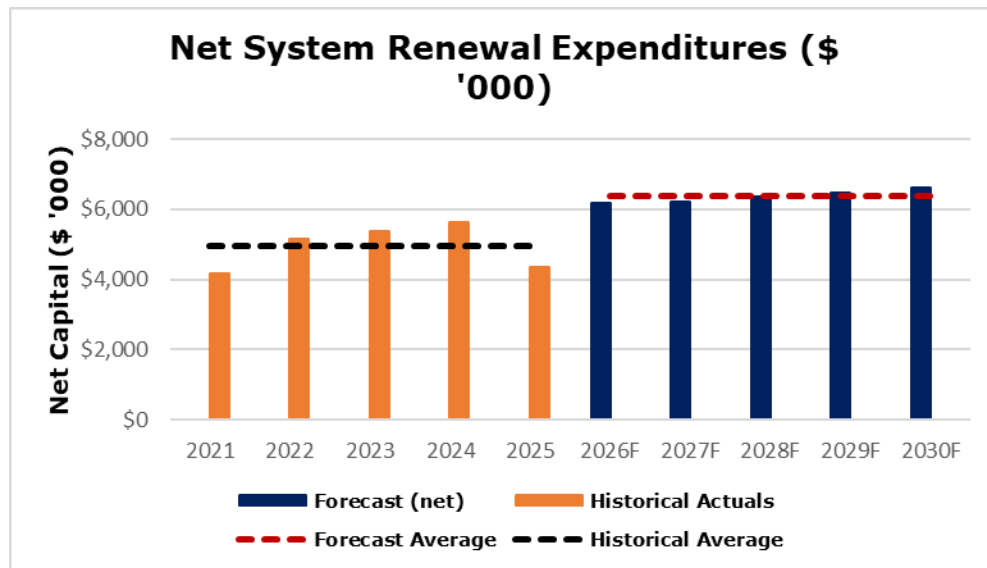


Additional details about each of these programs and priorities are provided in Section 5.4.1.2.1.

5.4.1.3.3 System Renewal

As shown in Figure 5.4-12, the forecast average expenditures for System Renewal are \$1.2M or 29% higher than the average expenditures during the current rate period. BHI's higher System Renewal expenditures in the 2026-2030 rate period are required to replace and upgrade its aging, deteriorating and obsolete distribution system assets, with the objective of mitigating reliability risk and managing reliability performance outcomes for customers. Defective equipment has been the leading cause of customer interruptions and customer hours of interruption over the historical period and the forecasted increase is primarily directed at investing in BHI's UG cables which are in deteriorating condition and have experienced increased failure during the current rate period. BHI is addressing this risk with investments in both cable replacement and cable rejuvenation, where appropriate.

Figure 5.4-12: Net System Renewal Expenditures Comparison



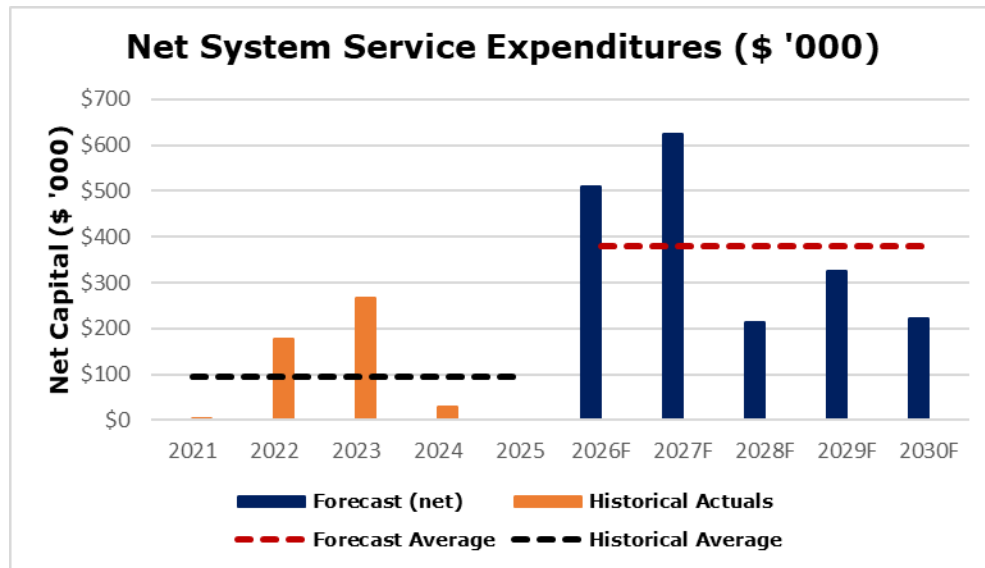
Additional details about each of these programs and priorities are provided in Section 5.4.1.2.2.

5.4.1.3.4 System Service

As shown in Figure 5.4-13, the forecast average expenditures for System Service are \$0.3M or 303% higher than the average expenditures during the current rate period. This increase is driven by:

- A number of System Service investments being deferred from the historical period due to changing needs, which resulted in no System Service investment in two of the historical years.
- **AMI 2.0:** the AMI Collector System Conversion/Upgrade needed to support BHI's transition to a next generation AMI 2.0 smart metering system. This involves replacing BHI's population of approximately 110 collectors and repeaters which are used to store and send meter data over to the headend system, which is necessary to maintain communication with the new metering units; and
- **Intelligent switches:** investment in Intelligent Switches to replace end-of-life manual switches in critical locations and on feeders prone to interruptions. Intelligent switches deliver improved reliability, resilience and efficiency by providing system controllers remote operability function to restore power more quickly during interruptions.

Figure 5.4-13: Net System Service Expenditures Comparison



Additional details about each of these programs and priorities are provided in Section 5.4.1.2.3.

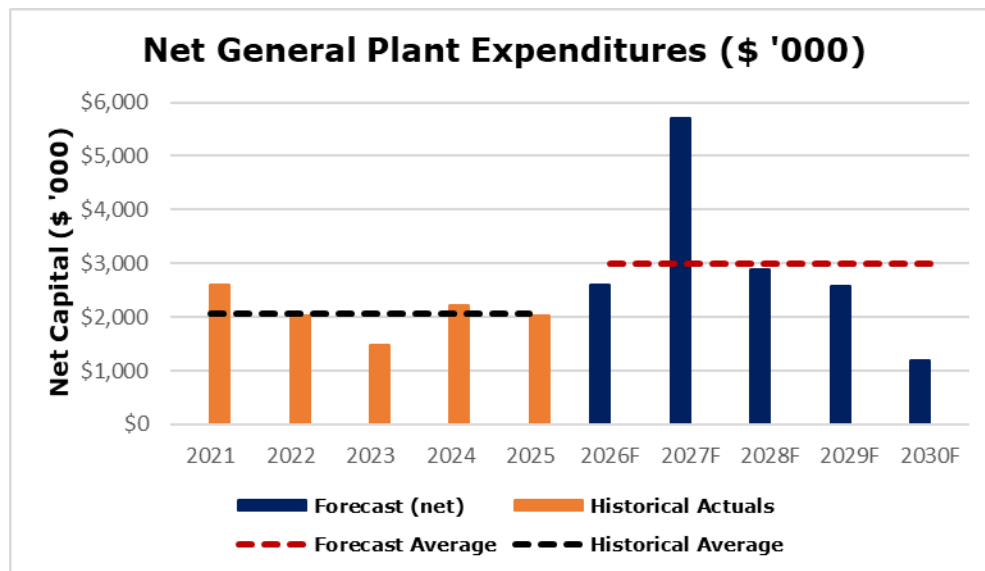
5.4.1.3.5 General Plant

As shown in Figure 5.4-14, the forecast average expenditures for are \$0.9M or 45% higher than the average expenditures during the current rate period. This increase is primarily driven by the following programs:

- **Fleet:** renew 28 of BHI's aging fleet assets, including a higher proportion of large vehicles such as bucket trucks, that are critical for outage response and executing BHI's capital and maintenance plans;
- **Buildings:** undertake required structural work (e.g. roof and foundation repairs) at BHI's head office as identified through 3rd party assessments;
- **SCADA/ADMS:** replace BHI's aging SCADA system and implement a fully integrated ADMS to deliver required functionality such as automated FLISR, Voltage and Reactive Power Optimization, and real-time monitoring and analytics; and
- **ERP:** replace BHI's existing ERP system which is outdated and unable to meet the growing demands of the business. The new ERP system, which will encompass enhanced accounting, procurement, project management, risk management,

compliance, and supply chain modules, is expected to improve user productivity through increased functionality and features.

Figure 5.4-14: Net General Plant Expenditures Comparison



Additional details about each of these programs and priorities are provided in Section 5.4.1.2.4.

5.4.1.4 Important Modifications to Capital Programs Since Last DSP

BHI has made the following updates to its Capital Programs since its previous DSP prepared as part its 2021 Cost of Service application:

- Underground Rebuilds:** BHI has introduced cable rejuvenation through cable injections to extend the life of existing cables. BHI will continue to replace or rebuild cables where needed. Further details are provided in the Material Investment Summary Documents in Appendix A.
- Submersible transformers:** installed primarily in the 1980s and 1990s, submersible transformers are situated below ground in vaults, making them highly susceptible to climate-related risks such as flooding. These aging transformers pose safety risks for maintenance crews and are prone to long interruption times when they fail, as accessing

and repairing these units is more complex than with above-ground alternatives. The replacement program involves the gradual replacement of BHI's end-of-life submersible transformers with above-ground alternatives.

- **Pole Replacement:** BHI will pilot the use of PoleEnforcers, a groundline reinforcement which safely reinforces poles with rot at or below their base to preserve the structural integrity of poles and consequently extend their useful lives and mitigate failure risk. BHI will continue to replace critical poles at risk of failure where needed. Further details are provided in the Material Investment Summary Documents in Appendix A
- **AMI Collector System Conversion/Upgrade:** BHI has begun converting and upgrading outdated commercial metering installations. BHI will continue the program over the forecast period. Further details are provided in the Material Investment Summary Documents in Appendix A
- **Fleet:** BHI is planning to replace its' small fleet of gasoline vehicles with EVs where the utilization and fuel saving advantages justifies such investments and are aligned with the overall objective of minimizing BHI's environmental impact and carbon footprint.

5.4.1.5 Forecast Impact of System Investments on System O&M

Costs

BHI anticipates reduced maintenance costs for certain deteriorated assets replaced over the DSP horizon. However, these reductions are expected to be offset by increased maintenance requirements for assets that are currently or expected to deteriorate into poor and very poor condition over the DSP horizon and are not scheduled for replacement.

In addition, some maintenance and inspection activities are uncorrelated with System Renewal expenditures, including:

- Inspection cycles in accordance with Appendix C of the DSC;
- Preventative maintenance (e.g., vegetation management);
- Reactive maintenance due to extreme weather events.

Due to the moderate pacing of BHI's planned System Renewal expenditures over the DSP horizon, no material impact on system O&M is anticipated.

5.4.1.6 Non-Distribution Activities

BHI has not included any expenditures for non-distribution activities in its budget.

5.4.2 Justifying Capital Expenditures

Customer Value

The top priorities identified by BHI's customers include affordability, reliability and infrastructure capacity²¹. BHI's robust asset management and capital planning processes seek to deliver the greatest value against these priorities through effective identification, optimization, prioritization and pacing of capital investments. This was tested and validated with customers through BHI's two-phased customer engagement process where more than 70% of customers rated the overall bill impact (i.e. affordability) of BHI's capital and operating plans as appropriate, with no meaningful difference from the subset of customers who indicated that they participated in a financial support program.

By delivering System Access projects, including capacity investments, new customer connections and service requests, and next generation smart metering solutions, BHI ensures that customers have the capacity and access to services to meet their evolving electricity needs.

The scope of capital investments in the System Renewal category have been paced to appropriately balance affordability while maintaining the safety and reliability of the distribution system in light of increasing assets at end-of-service life and extreme weather events. BHI has also introduced two new asset rejuvenation programs to complement traditional System Renewal, allowing BHI to deliver more value to customers through reduced safety and reliability risks, while mitigating bill impacts.

The proposed System Service investments deliver value to customers through increased grid modernization and automation, which supports distribution system reliability, sustainability and resiliency.

²¹ Exhibit 1, Appendix C: Customer Needs and Preferences Survey, p5

BHI's General Plant investments are identified and prioritized to support safe and efficient operations. Recent and planned IT/OT investments include an upgraded OMS, SCADA replacement and ADMS implementation, and a new ERP system. These upgrades will allow BHI to make better decisions to troubleshoot and respond to interruptions, provide more information and communication options to customers, and improve operational efficiencies by automating processes that were previously completed manually.

In order to align the overall capital budget envelope with customer expectations, BHI has prioritized and optimized its proposed capital investments to include the most critical projects and programs most aligned with customer's priorities, while a number of lower priority or less urgent needs have been deferred, reduced, or eliminated from the budget.

Technological Changes and Innovation

With the emergence of new policies, net zero targets, increasing prioritization of electrification, innovative technologies, and changing customer expectations, the distribution grid is quickly evolving from a system-centric, one-way power flow system to a customer-centric, bi-directional power flow system. Customers now have the capability to generate their own electricity via DERs, and as a result, distribution system planning and operations are becoming increasingly complex, and maintaining grid integrity is becoming more challenging. Practices which have historically been acceptable for a traditional grid need to evolve, and an improved and more modernized grid is required to accommodate this evolution.

BHI has continued to identify strategic investments that will allow it to modernize its grid in a prudent manner as well as realise other operational efficiencies. Examples include:

- **Distribution Automation and Modernization:** BHI's grid modernization efforts include consideration of energy transition timelines, DSO implementation readiness and the technology landscape. Central to this evolution is the phased implementation of an ADMS based on the evolving functionality requirements of the distribution system. The ADMS will be supported by intelligent field devices at critical locations, such as substations, switching open points, and DER connections, all connected via a robust and reliable communication network utilizing both wired (fiber) and cellular systems. BHI plans to automate more of its network, enabling an expanded self-healing network that

reduces interruption size and duration while minimizing interruption times through increased flexibility and remote operation.

- **Transition to next generation AMI 2.0 system:** AMI 2.0 enables faster, more reliable meter communication, with real-time data integrating with BHI's OMS and CIS, which will help optimize outage prediction and outage response. This investment also supports access to more reliable real-time data by customers through BHI's customer portal, and enables potential new programs that would allow customers to utilize home analytics, vehicle to grid charging, battery storage or other DERs.
- **Vehicle (Electrification of BHI's Fleet):** As part of BHI's sustainability efforts, BHI will replace vehicles that are at end of life and in need of replacement, with electric or hybrid vehicles, where these vehicles can still support BHI's operation activities. In addition, BHI will invest in electrical charging infrastructure to support the transition to these EVs.
- **Asset Rejuvenation:** BHI has introduced two new asset rejuvenation programs to complement traditional replacement programs for underground cables and wood poles. These innovative programs extend the life of existing assets, allowing replacement to be deferred and costs to be reallocated to other deteriorated assets. This allows BHI to deliver more value to customers through reduced safety and reliability risks, while mitigating bill impacts.
- **GridSmartCity Cooperative:** BHI is a member of the GridSmartCity Cooperative (GSC), a group of 18 Ontario LDCs, serving 935,000 customers across 65 communities in Ontario with a common focus of achieving scale efficiencies and purchasing power while advancing innovation, reliability, and efficiency across members' service areas. By leveraging its membership with the GridSmartCity Cooperative, BHI, among other things is able to share in cost savings (\$2M in 2024) through joint tendering for electrical distribution system equipment.

Consideration of Traditional Planning Needs

As previously explained in Section 5.3.1, traditional planning needs, including customer growth, asset condition, and reliability are key inputs considered as part of BHI's AM processes. BHI undertakes system studies to identify areas that may require investments to accommodate required capacity. Load growth and supply of power is a direct input into BHI's planning for System Access and System Service type projects. It is also considered when rebuilds are

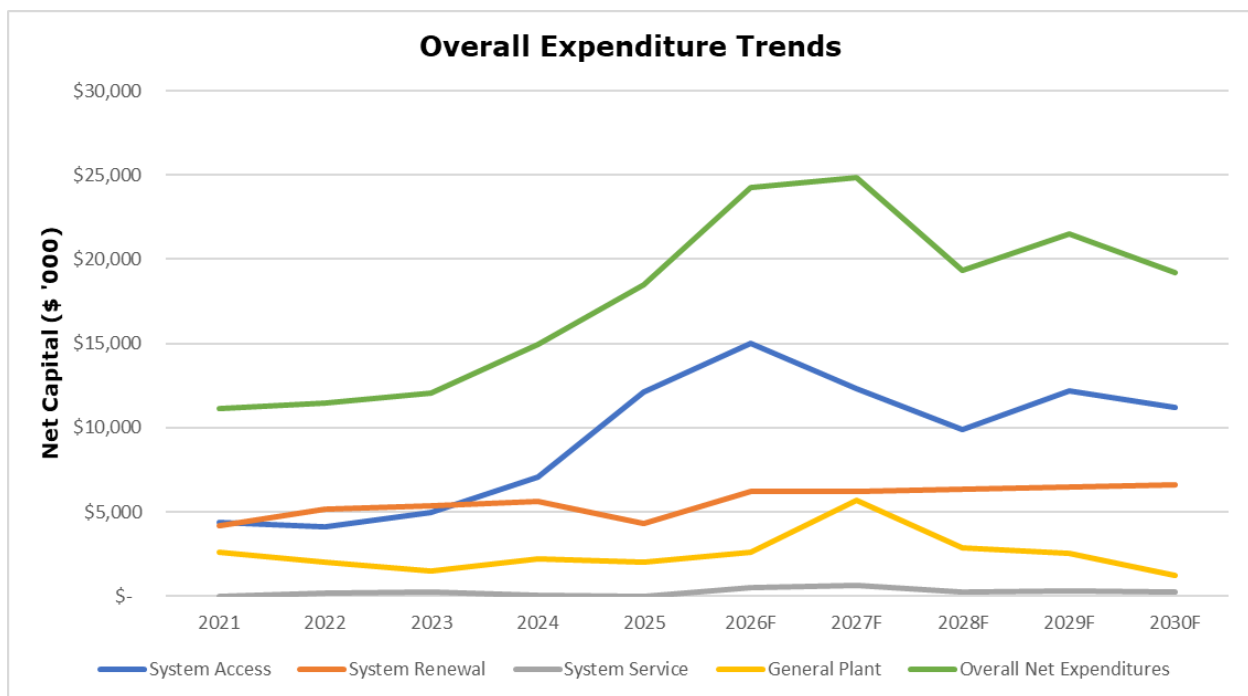
completed in an effort to ensure that existing areas will be able to meet the existing and forecasted future demand needs for customers. Load growth is also a key input into the regional planning process which helps to identify future requirements (both wires and non-wires) to accommodate load growth.

Asset condition and reliability data are key inputs considered by BHI when identifying, selecting, and prioritizing System Renewal expenditures. It is through the ACA and reliability studies that BHI can identify the portion of the system that has reached (or soon will) a point that requires renewal, and where in the system those assets pose the greatest risk to reliability and/or public safety. Asset that are in poor and very poor condition, or that can deteriorate quickly and are critical to the reliability of the distribution system, directly influence the level of investment proposed over the forecast period.

Overall Capital Expenditures

The overall net capital expenditure trends over the 2021 to 2030 period are shown in Figure 5.4-15.

Figure 5.4-15: Overall Expenditure Trends



Over the forecast period BHI's capital expenditures will deliver the objectives described throughout this DSP, including the provision safe, reliable, and affordable distribution services. The proposed level of spending is also aimed at addressing underperforming assets in order to achieve the four performance outcomes established by the OEB, while also adhering to BHI's established AM objectives set out in Section 5.3.1.1. BHI's overall expenditures will allow it to continue its journey of modernizing the grid to meet rapidly evolving system demands, while realizing benefits from new technology, such as an upgraded SCADA and related SCADA-enabled devices and the implementation of a new ADMS. BHI's plan is a prudent and balanced approach to meets its obligations, address customer needs and prepare for the energy transition.

BHI's overall plan supports Ontario's wider energy needs and direction from the Ministry of Energy and Electrification. As outlined in the Letter from the Minister of Energy and Electrification²² to the Ontario Energy Board in December 2024 and 'Ontario's Affordable Energy Future Report²³', BHI's investments support:

- The need to strengthen the grid and ensure the system becomes more resilient to extreme weather events;
- The modernization of the grid, through the installation of smart devices, enabling future operational efficiencies;
- The continued support of timely housing connections in compliance with the latest DSC requirements;
- A prudent approach to investment in the expansion of the grid to support the needs of customers now but also in the near future.

The forecasted average overall capital expenditures are expected to be approximately 50% higher than the historical average. This increase is primarily due to customer driven System Access investments as well as investments in metering infrastructure and software systems (ADMS and ERP), underground rebuilds, pole replacements, together with expenditures on vehicles and buildings. While the forecasted expenditures remain relatively stable overall, an

²² Letter from the Minister of Energy and Electrification – December 2024.

²³ Ontario's Affordable Energy Future: The Pressing Case for More Power – October 2024.

increase is anticipated in 2026, primarily driven by System Access and System Renewal. The increase in 2026 capital investments in discretionary System Renewal projects is required in order for BHI to anchor all its major recurring programs in the first year, to ensure maximum benefit to and the needs of its customers across the five-year period are met. Investments in technology related projects are required for full implementation and subsequent adoption over the rate period to extract maximum benefits, rather than investing piece-meal. Also, coincidentally, investments in System Access projects that are customer driven and non-discretionary, are having a major impact on BHI Capital Plan because of the timing, which is necessitated by the customer needs and beyond BHI control.

5.4.2.1 Material Investments

Table 5.4-15: Proposed Capital Investments during Test Year - Projects over Materiality

Category	Project Description	Priority Rank	2026 Planned Expenditure (\$ '000)
System Access	Dundas St Road Widening - (Appleby line to Northampton Boulevard)	1	2,666
	Dundas St Road Widening - (Northampton Boulevard to Guelph line)		927
	Other - MTO/City/Region/MX Projects		229
	General Service - Overhead		1,199
	General Service - Underground		1,683
	Transformers – New Connections		354
	Meters – New Connections		408
	Smart Meter Residential Replacement Program		2,600
	Suite Metering		609
	Metering Infrastructure and Systems		168
	Subdivision Buybacks		750
	Major Transit Station Area Development (Aldershot Go)		1,258
	Major Transit Station Area Development (Burlington Go)		985
	Major Transit Station Area Development (Appleby Go)		1,150
System Renewal	MS Feeders Cable Replacement	2	199
	Underground Rebuilds	3, 16	2,091

Category	Project Description	Priority Rank	2026 Planned Expenditure (\$ '000)
	Pole Replacement Program	4, 11	1,581
	Switchgear Replacement and Substation Automation (Vista)	5	408
	Station Relays Replacement	6	408
	Station Transformer Replacement Program	7	408
	Replacement Substation Circuit Breakers	8	255
	Transformer Replacement	9	474
	Switch Replacement Program	12, 15	184
	Other Substation Renewal	Various	66
	Other System Renewal	28	107
System Service	AMI Collector System Conversion/Upgrade (Partial)	14	306
	Intelligent Switches - OH	42	204
General Plant	Buildings	Various	871
	Other Computer Hardware & Software	Various	485
	Vehicles	19, 33	1,031
	CIS Capital (on-going)	22	61
	SCADA / GIS / AMI / OMS	30,39	82
	Business Applications - ERP Enhancements / Upgrades	41	24
	Tools	44	20
	Office Equipment	48	20
Total Net Capital Expenditures			24,272



Burlington**hydro**_{inc.}

Appendix A

Material Investment Summary Documents

**Project Name:** Dundas St Road Widening - (Appleby Line to Northampton Boulevard)**OEB Investment Category:** System Access**General Information on Project**

Overview	This project involves the relocation of BHI plant to accommodate road widening work along Dundas Street (Appleby Line to Northampton Boulevard) as part of the Region of Halton's Dundas Corridor Study ¹ . The project is non-discretionary per BHI's statutory obligations under the Public Service Works on Highways Act ("PSWHA") related to the relocation of utility infrastructure installed within municipal or provincial road allowances. In accordance with the PSWHA, BHI has assumed the cost of labour (including labour-saving equipment) shall be apportioned equally between the road authority and BHI. Customers benefit as the older distribution plant is replaced with new equipment built to current standards, which reduces the risk of asset failure.					
Scope and volume of work	Relocation of existing overhead high voltage power line (approx. 2.6km), 83 poles and associated hardware (i.e. switches, pole mounted transformers, primary and secondary dips services,), 8 transformers and installation of 1.6km of underground cables for 3 circuits.					
Capital Investment	Project	2026	2027	2028	2029	2030
	Dundas St Road Widening - (Appleby line to Northampton Boulevard) - Gross	\$9,403,454	\$2,130,630	\$0	\$0	\$0
	Dundas St Road Widening - (Appleby line to Northampton Boulevard) - Capital Contribution	-\$6,737,699	-\$1,526,625	\$0	\$0	\$0
	Dundas St Road Widening - (Appleby line to Northampton Boulevard) - Net	\$2,665,755	\$604,005	\$0	\$0	\$0
Key Project Dates	Start Date:	Jan 1, 2026				
	In-Service Date:	Dec 31, 2026 (for completed and energized portion)				
	Expenditure Timing:	2026-Q1: \$666,439, Q2: \$ 666,439, Q3: \$666,439 and Q4: \$ 666,439				
	Factors affecting the timing	Relocation project timelines are driven by the Region's roadway project timelines. BHI coordinates with the Region and other stakeholders to ensure that its plant is relocated according to the project timelines.				

¹ EB-2020-0007, DSP Appendix 4: Region of Halton's Dundas Corridor Study

Comparative historical Information

This a new relocation phase along Dundas St. and as such there is no comparative historical information. Each relocation project is unique, with varying design and scope differences that inherently affect the costs (e.g. number of circuits to be relocated, distance by which the utility infrastructure must be set back from the road, whether relocation can be accommodated on the same side of the road, site conditions, etc.). BHI arrived at the cost estimate for this project based on the road widening design from Halton Region and in accordance with O. Reg. 22/04, Canadian Standards Association (CSA) standards, and BHI standards and specifications. Material costs were estimated using BHI's most recent purchase prices. Labour and equipment costs were derived using recent contractor pricing.

Investment Priority

The priority of this investment is high since it is a mandatory project driven by the need to relocate distribution plant pursuant to BHI's statutory obligations under the PSWHA.

Further details are provided in Sections 5.3.1.3.3 and 5.4.2.1 of the DSP.

Analysis of Project and Project Alternatives

BHI provides input to the Region on the most cost-effective alternatives for relocating its distribution assets based on the proposed road design. The Region determines the final project design.

- **Effect of the investment on system operation efficiency and cost-effectiveness**
Relocating distribution assets as part of third-party infrastructure projects often requires existing assets to be replaced with new assets. Where existing assets are candidates for renewal based on their condition, renewing them as part of a relocation project can reduce future maintenance and renewal costs. Assets being replaced are not always candidates for renewal, so BHI works closely with the Region to find opportunities to minimize relocation requirements to reduce overall project costs.
- **Net benefits accruing to customers**
Customers benefit as the older distribution plant is replaced with new equipment built to current standards, which reduces the risk of asset failure.
- **Impact of the investment on reliability performance including frequency and duration of outages**
Although the primary driver of this project is not to improve reliability, the renewal of distribution plant based on current design standards can contribute to a reduced risk of asset failure.

Project Alternatives

- **Status Quo:** This is a mandatory investment. Not proceeding with this project would be in direct violation of the PSWHA.
- **Like for Like:** where possible, relocating distribution assets is typically performed on a like-for-like basis according to the final project design determined by Halton Region.
- **Upgrade:** Where required, relocating distribution assets shall be performed according to the recent Ontario Regulation 22/04 Electrical Distribution Safety, Canadian Standard Association

(CSA), Ontario Electrical Safety Code (OESC), Electrical Safety Association (ESA) and BHI standards and specifications. This is the preferred option for this project.
Evaluation Criteria and Information
<p>Investment Need</p> <p>The primary driver for this investment is third-party infrastructure development, which requires the relocation of BHI plant. The project is non-discretionary pursuant to BHI's statutory obligations under the PSWHA.</p> <p>Investment Justification</p> <p>BHI coordinates with road authorities and other stakeholders to ensure that its plant is relocated according to the project plan, and that relocated assets are built in alignment with Ontario Regulation 22/04, BHI's standards and long-term needs. BHI regularly updates its construction standards to reflect any changes in Canadian Standard Association (CSA) standards or new materials.</p> <p>Efficiency</p> <p>Where existing assets are candidates for renewal based on their condition, renewing them as part of a relocation project can reduce future maintenance and renewal costs.</p> <p>Customer Value</p> <p>Customers benefit as the older distribution plant is replaced with new equipment built to current standards, which reduces the risk of asset failure.</p> <p>Reliability</p> <p>Although the primary driver of this project is not to improve reliability, the renewal of distribution plant based on current design standards can contribute to a reduced risk of asset failure.</p> <p>Safety</p> <p>All new distribution infrastructure specifications and installations are made in accordance with BHI and Canadian Standards Association (CSA) standards and meet the safety requirements of Ontario Regulation 22/04.</p> <p>Statutory/regulatory obligations</p> <p>This investment is a mandatory project driven by the need to relocate distribution plant pursuant to BHI's statutory obligations under the PSWHA.</p>
Other Information
<p>Factors Relating to Customer Preferences or Input from Customers and Other Third Parties</p> <p>BHI's direct customer for this project is the Region. Relocation of BHI plant reflects input from the Region and is ultimately designed to meet the requirements of the final project design.</p> <p>As part of BHI's recent customer engagement survey, customers were asked about the importance and appropriateness of planned System Access expenditures, including projects to relocate poles and transformers to accommodate road widening. More than 91% of customers rated investment in these System Access projects as important and more than 84% rated proposed spending levels as appropriate.</p>

Project letters are provided to BHI's electricity customers within the area of the relocation, which gives them an opportunity for input. Input or concerns may be incorporated into the design, where feasible, as part of the project planning stage.

Consideration of Non-Wires Solutions

N/A



Program Name: Dundas St Road Widening - (Northampton Boulevard to Guelph line)

OEB Investment Category: System Access

General Information on Project

Overview	This project involves the relocation of BHI plant to accommodate road widening work along Dundas Street (Northampton Boulevard to Guelph line) as part of the Region of Halton’s Dundas Corridor Study ¹ . The project is non-discretionary per BHI’s statutory obligations under the Public Service Works on Highways Act (“PSWHA”) related to the relocation of utility infrastructure installed within municipal or provincial road allowances. In accordance with the PSWHA, BHI has assumed the cost of labour (including labour-saving equipment) shall be apportioned equally between the road authority and BHI. Customers benefit as the older distribution plant is replaced with new equipment built to current standards, which reduces the risk of asset failure.					
Scope and volume of work	The project includes: Relocation of existing overhead high voltage power line (approx. 1.8km), 43 poles and associated hardware (i.e. switches, pole mounted transformers, primary and secondary dips services,) and installation of 300m of underground cables for 3 circuits.					
Capital Investment		2026	2027	2028	2029	2030
	Dundas St Road Widening - (Northampton Boulevard to Guelph line) - Gross	\$2,064,473	\$0	\$0	\$0	\$0
	Dundas St Road Widening - (Northampton Boulevard to Guelph line)- Capital Contribution	-\$1,137,178	\$0	\$0	\$0	\$0
	Dundas St Road Widening - (Northampton Boulevard to Guelph line) - Net	\$927,295	\$0	\$0	\$0	\$0
Key Project Dates	Start Date:	Jan 1, 2026				
	In-Service Date:	Dec 31, 2026				
	Expenditure Timing:	2026 Q1: \$231,824 Q2: \$231,824 Q3: \$231,824 Q4: \$231,824				
	Factors affecting the timing	Relocation project timelines are driven by the Region’s roadway project timelines. BHI coordinates with the Region and other stakeholders to ensure that its plant is relocated according to the project timelines.				
Comparative historical Information						
This is a new relocation phase along Dundas St and as such there is no comparative historical information. Each relocation project as unique, with varying design and scope differences that inherently affect the costs (e.g. number of circuits to be relocated, distance by which the utility infrastructure						

¹ EB-2020-0007, DSP Appendix 4: Region of Halton's Dundas Corridor Study

must be set back from the road, whether relocation can be accommodated on the same side of the road, site conditions, etc.). BHI arrived at the cost estimate for this project based on the road widening design from Halton Region and in accordance with O. Reg. 22/04, Canadian Standards Association (CSA) standards, and BHI standards and specifications. Material costs were estimated using BHI's most recent purchase prices. Labour and equipment costs were derived using recent contractor pricing.

Investment Priority

The priority of this investment is high since it is a mandatory project driven by the need to relocate distribution plant pursuant to BHI's statutory obligations under the PSWHA.

Further details are provided in Sections 5.3.1.3.3 and 5.4.2.1 of the DSP.

Analysis of Project and Project Alternatives

BHI provides input to the Region on the most cost-effective alternatives for relocating its distribution assets based on the proposed road design. The Region determines the final project design.

- **Effect of the investment on system operation efficiency and cost-effectiveness**
Relocating distribution assets as part of third-party infrastructure projects often requires existing assets to be replaced with new assets. Where existing assets are candidates for renewal based on their condition, renewing them as part of a relocation project can reduce future maintenance and renewal costs. Assets being replaced are not always candidates for renewal, so BHI works closely with the Region to find opportunities to minimize relocation requirements to reduce overall project costs.
- **Net benefits accruing to customers**
Customers benefit as older distribution plant is replaced with new equipment built to current standards, which reduces the risk of asset failure.
- **Impact of the investment on reliability performance including frequency and duration of outages**
Although the primary driver of this project is not to improve reliability, newly installed assets tend to be more reliable. All the existing assets will be removed with this relocation project.
- **Project Alternatives**
 - Status Quo: This is a mandatory investment. Not proceeding with this project would be in direct violation of the PSWHA.
 - Like for Like: where possible, relocating distribution assets is typically performed on a like-for-like basis according to the final project design determined by Halton Region.
 - Upgrade: Where required, relocating distribution assets shall be performed according to the recent Ontario Regulation 22/04 Electrical Distribution Safety, Canadian Standard Association (CSA), Ontario Electrical Safety Code (OESC), Electrical Safety Association (ESA) and BHI standards and specifications. This is the preferred option for this project.

Evaluation Criteria and Information
<p>Investment Need The primary driver for this investment is third-party infrastructure development, which requires the relocation of BHI plant. The project is non-discretionary pursuant to BHI's statutory obligations under the PSWHA.</p> <p>Investment Justification BHI coordinates with road authorities and other stakeholders to ensure that its plant is relocated according to the project plan, and that relocated assets are built in alignment with BHI's standards and long-term needs. BHI regularly updates its construction standards to reflect any changes in Canadian Standard Association (CSA) standards or new materials.</p> <p>Efficiency Where existing assets are candidates for renewal based on their condition, renewing them as part of a relocation project can reduce future maintenance and renewal costs.</p> <p>Customer Value Customers benefit as the older distribution plant is replaced with new equipment built to current standards, which reduces the risk of asset failure. The existing infrastructure will be removed.</p> <p>Reliability Although the primary driver of this project is not to improve reliability, the installation of new distribution assets based on current design standards can contribute to a reduced risk of asset failure.</p> <p>Safety All new distribution infrastructure specifications and installations are in accordance with BHI and Canadian Standards Association (CSA) standards and meet the safety requirements of Ontario Regulation 22/04.</p> <p>Statutory/regulatory obligations This investment is a mandatory project driven by the need to relocate distribution plant pursuant to BHI's statutory obligations under the PSWHA.</p>
Other Information
<p>Factors Relating to Customer Preferences or Input from Customers and Other Third Parties BHI's direct customer for this project is the Region. Relocation of BHI plant reflects input from the Region and is ultimately designed to meet the requirements of the final project design.</p> <p>As part of BHI's recent customer engagement survey, customers were asked about the importance and appropriateness of planned System Access expenditures, including projects to relocate poles and transformers to accommodate road widening. More than 91% of customers rated investment in these System Access projects as important and more than 84% rated proposed spending levels as appropriate.</p> <p>Project letters are provided to BHI's electricity customers within the area of the relocation, which gives them an opportunity for input. Input or concerns may be incorporated into the design where feasible, as part of the project planning stage.</p> <p>Consideration of Non-Wires Solutions N/A</p>



Program Name: General Service - Overhead

OEB Investment Category: System Access

General Information on Project

Overview The General Service - Overhead program consists of several stand-alone projects to supply overhead services (new and upgrades) to residential, commercial and industrial customers. Program expenditures are customer driven and support overhead primary and secondary infrastructure to service new and existing customers. The forecasted number of services is based on historical trends and anticipated future developments. Expenditures in this program are mandatory due to BHI's obligation under the Distribution System Code (DSC) and its Conditions of Service to connect new customers within its service territory.

Scope and volume of work Scope and volume of work can vary significantly based on the needs of the customers and the requirements for service. This can affect both labour and material costs across a wide range of customers.

Capital Investment	Program	2026	2027	2028	2029	2030
	General Service - Overhead - Gross	\$1,326,000	\$1,352,000	\$1,379,300	\$1,406,600	\$1,435,200
	General Service - Overhead - Capital Contr	-\$127,500	-\$130,000	-\$132,625	-\$135,250	-\$138,000
	General Service - Overhead - Net	\$1,198,500	\$1,222,000	\$1,246,675	\$1,271,350	\$1,297,200

Key Project Dates	Start Date:	Jan 1, 2026
	In-Service Date:	Dec 31, 2026
	Expenditure Timing:	Q1: 25% Q2:25% Q3:25% Q4: 25%
	Factors affecting the timing	Customer requests

Comparative historical Information

Program	2021	2022	2023	2024	2025 Fcst
General Service - Overhead - Gross	\$853,209	\$1,211,639	\$2,430,701	\$1,973,106	\$1,300,000
General Service - Overhead - Capital Contr	-\$286,184	-\$278,665	-\$1,375,691	-\$200,538	-\$125,000
General Service - Overhead - Net	\$567,025	\$932,974	\$1,055,010	\$1,772,568	\$1,175,000

BHI's average annual net expenditure for this program was \$1.1M between 2021 to 2025, although expenditures vary with customer/developer demand, economic activity and the type of services requested. This program includes requests for new, relocated and upgraded services for residential, GS<50 and GS >50 customers. The scope and complexity of these projects can vary materially, which can impact the overall program costs from year to year.

The trend indicates demand for services in this program has been increasing since 2021. As such, the 2026-2030 forecast was estimated based on the historical average and expected new connections and upgrades due to increased EV adoption, as an example.

Economic Evaluation

The connection cost of condominium buildings and commercial and industrial services is 100% recoverable from the developer. BHI conducts economic evaluations to determine customer contributions in this program in accordance with Section 3.2, and Appendix B of the DSC in the case of system expansions. Results of economic evaluations vary based on the forecasted demand and capital costs.

Investment Priority

This is a mandatory investment pursuant to BHI's obligation to connect under Section 3.2 of the DSC.

Analysis of Project and Project Alternatives

Individual projects are driven by customer / developer requests and their specific requirements. Project alternatives are limited as design and servicing options are standardized per BHI's policies and practices.

Effect of the investment on system operation efficiency and cost-effectiveness

New distribution infrastructure added to BHI's distribution system as a result of this program will increase the number assets included in inspection, maintenance and testing programs. This puts upward pressure on system O&M costs.

Evaluation Criteria and Information

Investment Need

The primary driver for this program is customer requests for electrical infrastructure to supply new services or upgrade existing services.

Investment Justification

These expenditures are driven by customer requests, and are therefore not an output of BHI's asset management process. BHI is mandated to provide timely service connections or upgrades to its customers pursuant to the DSC and its Conditions of Service.

Efficiency

New distribution infrastructure added to BHI's distribution system as a result of this program must be in accordance with regulations and BHI standards. In certain cases, this could result in increased system efficiency (e.g. more efficient transformers with fewer losses).

Customer Value

Customers benefit from having a new distribution infrastructure that meets their capacity requirements and is modern, reliable, efficient and built to current standards.

Reliability

Reliability performance for the specific assets being installed is expected to be the same or better than BHI's average since the probability of asset failure is lower with new equipment which meets current standards.

Safety

All new distribution infrastructure specifications and installations are made in accordance with BHI and Canadian Standards Association (CSA) standards, and Ontario Regulation 22/04.

Cyber-Security and Privacy

N/A

Environmental Benefits

BHI installs high efficiency transformers with lower losses, and new overhead wires that minimize losses and voltage drop for residential and commercial services in this program.

Statutory/regulatory obligations

BHI is obligated under the DSC and its Conditions of Service to connect new customers within its service territory.

Other Information**Factors Relating to Customer Preferences or Input from Customers and Other Third Parties**

As per BHI's recent customer engagement survey, customers were asked about the importance and appropriateness of planned System Access expenditures, which BHI is required to perform to connect customers to the distribution system. More than 91% of customers rated investment in these System Access projects as important and more than 84% rated proposed spending levels as appropriate.

Consideration of Non-Wires Solutions

N/A

**Program Name:** General Service - Underground**OEB Investment Category:** System Access**General Information on Project**

Overview The General Service - Underground program consists of several stand-alone projects to supply underground services (new and upgrades) to residential, commercial and industrial customers. Program expenditures are customer driven and support underground primary and secondary infrastructure to service new and existing customers. The forecasted number of services is based on historical trends and anticipated future developments. Expenditures in this program are mandatory due to BHI's obligation under the Distribution System Code (DSC) and its Conditions of Service to connect new customers within its service territory.

Scope and volume of work Scope and volume of work can vary significantly based on the needs of the customers and the requirements for service. This can affect both labour and material costs across a wide range of customers.

Capital Investment	Program	2026	2027	2028	2029	2030
	General Service - Underground - Gross	\$2,448,000	\$2,496,000	\$2,546,400	\$2,596,800	\$2,649,600
	General Service - Underground - Capital Contr	-\$765,000	-\$780,000	-\$795,750	-\$811,500	-\$828,000
	General Service - Underground - Net	\$1,683,000	\$1,716,000	\$1,750,650	\$1,785,300	\$1,821,600

Key Project Dates	Start Date:	Jan 1, 2026
	In-Service Date:	Dec 31, 2026
	Expenditure Timing:	Q1: 25% Q2: 25% Q3: 25% Q4: 25%
	Factors affecting the timing	Customer requests

Comparative historical Information

Program	2021	2022	2023	2024	2025 Fcst
General Service - Underground - Gross	\$2,519,839	\$3,158,538	\$4,090,767	\$3,199,678	\$2,730,000
General Service - Underground - Capital Contr	-\$1,072,384	-\$1,537,285	-\$2,887,465	-\$1,649,000	-\$750,000
General Service - Underground - Net	\$1,447,455	\$1,621,253	\$1,203,302	\$1,550,678	\$1,980,000

BHI's average annual net expenditure for this program was approximately \$1.45M between 2021 to 2025, although expenditures vary with customer/developer demand, economic activity and the type of services requested. This program includes requests for new, relocation and upgrading services for residential,

GS<50 and GS >50 customers. The scope and complexity of these projects can vary materially, which can impact the overall program costs from year to year.

The 2026-2030 forecast was estimated based on the historical average and expected new connections and upgrades due to increased EV adoption, as an example.

Economic Evaluation

The connection cost of condominium buildings, and commercial and industrial services is 100% recoverable from the developer. BHI conducts economic evaluations to determine customer contributions in this program in accordance with Section 3.2 and Appendix B of the DSC. Results of economic evaluations vary based on the forecasted demand and capital costs for each project.

Investment Priority

This is a mandatory investment pursuant to BHI's obligation to connect under Section 3.2 of the DSC.

Analysis of Project and Project Alternatives

Individual projects are driven by customer / developer requests and their specific requirements. Project alternatives are limited as design and servicing options are standardized per BHI's policies and practices.

Effect of the investment on system operation efficiency and cost-effectiveness

New distribution infrastructure added to BHI's distribution system as a result of this program will increase the number assets included in inspection, maintenance and testing programs. This puts upward pressure on system O&M costs.

Evaluation Criteria and Information

Investment Need

The primary driver for this program is customer requests for electrical infrastructure to supply new services or upgrade existing services.

Investment Justification

These expenditures are driven by customer requests, and are therefore not an output of BHI's asset management process. BHI is mandated to provide timely service connections or upgrades to its customers pursuant to the DSC and its Conditions of Service

Efficiency

New distribution infrastructure added to BHI's distribution system as a result of this program must be in accordance with regulations and BHI standards. In certain cases, this could result in increased system efficiency (e.g. more efficient transformers with fewer losses).

Customer Value

Customers benefit from having a new distribution infrastructure that meets their capacity requirements and is modern, reliable, efficient and built to current standards.

Reliability

Reliability performance for the specific assets being installed is expected to be the same or better than BHI's average since the probability of asset failure is lower with new equipment which meets current standards.

Safety

All new distribution infrastructure specifications and installations are made in accordance with BHI and Canadian Standards Association (CSA) standards, and Ontario Regulation 22/04.

The installation of underground vs. overhead infrastructure reduces the likelihood of energized wires coming into contact with buildings and other objects. It also reduces the likelihood of supporting pole structures falling and causing personal injury and property damage.

Cyber-Security and Privacy

N/A

Environmental Benefits

BHI installs high efficiency transformers with lower losses for residential and commercial services in this program.

Statutory/regulatory obligations

BHI is obligated under the DSC and its Conditions of Service to connect new customers within its service territory.

Other Information**Factors Relating to Customer Preferences or Input from Customers and Other Third Parties**

As per BHI's recent customer engagement survey, customers were asked about the importance and appropriateness of planned System Access expenditures, which BHI is required to perform to connect customers to the distribution system. More than 91% of customers rated investment in these System Access projects as important and more than 84% rated proposed spending levels as appropriate.

Consideration of Non-Wires Solutions

N/A

**Program Name:** Transformers - New Connections**OEB Investment Category:** System Access**General Information on Project**

Overview This program consists of several stand-alone projects associated with the installation of distribution transformers (pole mounted, pad mounted, vault type and submersible) as connection assets, to supply new residential, condominium, commercial, industrial and institutional services. The primary function of these transformers is to step down power from the medium voltage distribution system to the final voltage rating for customer use. Expenditures in this program are mandatory pursuant to BHI's obligation under Section 28 of the *Electricity Act, 1998* and Section 3 of the Distribution System Code (DSC) to connect new customers within its service territory.

Scope and volume of work The scope of work includes supply and installation of pad-mount transformers (underground services) and pole-mount transformers (overhead services). The volume and duration of work depends on the needs of the customers and servicing requirements and can vary significantly across rate classes.

Capital Investment	Program	2026	2027	2028	2029	2030
	Transformers - New Connections - Net	\$353,940	\$360,048	\$367,318	\$374,588	\$382,205

Key Project Dates	Start Date:	Jan 1, 2026
	In-Service Date:	Dec 31, 2026
	Expenditure Timing:	Timing based on customer demand
	Factors affecting the timing:	Driven by customer requests

Comparative historical information

Program	2021	2022	2023	2024	2025 Fcst
Transformers - New Connections - Net	\$172,519	\$528,959	\$476,393	\$335,151	\$347,000

BHI installs/upgrades approximately 10-15 distribution transformers per year under this program. Average annual expenditures for this program are expected to be \$372k from 2021 to 2025. Although expenditures vary with customer/developer demand, economic activity and the type of services requested, BHI expects expenditures over the forecast period to be consistent with the historical average.

The timing of customer driven requests does not occur evenly throughout the year, which can impact the start time and duration of projects, dependent upon the availability of resources. BHI mitigates delays through effective project management. Lead times for certain transformers can also impact the timely installation of distribution transformers. To mitigate supply chain risk, BHI orders equipment with enough lead time to ensure it is available when needed and maintains ongoing communication and coordination with customers, developers and other 3rd parties.

The 2026-2030 budget is informed by anticipated new underground subdivision projects and historical trends for transformers installations and costs.

Investment Priority

This is a mandatory investment pursuant to BHI's obligation to connect under Section 3.2 of the DSC.

For more details, see Sections 5.3.1.3.3 and 5.4.2.1 of the DSP.

Project Alternatives

- Design: Transformer installations are driven by the specific requirements of the customer. Design alternatives are limited as servicing options are standardized through BHI policies and practices, in line with its Conditions of Service.
- Scheduling: Transformers are installed in accordance with timelines for connecting customers in the DSC.
- Funding: Ownership of assets may be available to customers in certain scenarios, in accordance with BHI's Conditions of Service.

Evaluation Criteria and Information**Investment Need**

The primary driver for this program is customer requests for electrical infrastructure to supply new services.

Efficiency

New distribution transformers added to BHI's distribution system as a result of this program will increase the number assets included in inspection, maintenance and testing programs. This puts upward pressure on system O&M costs.

Customer Value

New customers benefit from having new distribution transformers that are reliable and built to current standards.

Reliability

Reliability performance for the specific assets being installed is expected to be the same or better than BHI's average since the probability of asset failure is lower with new equipment meeting current standards.

Safety

All new distribution transformer specifications and installations are in accordance with BHI and Canadian Standards Association (CSA) standards, and Ontario Regulation 22/04.

Cyber-Security and Privacy

N/A

Environmental Benefits

BHI installs high efficiency transformers for residential and commercial services. New transformers are also fitted with an internal current limiting fuse to prevent rupturing of the transformer tank in the event of a failure. This mitigates potential oil spills from failed transformers.

Statutory/regulatory obligations

This program is driven by the requirement to provide customers with a timely service connection pursuant to BHI's mandated service obligation under the Electricity Act, the DSC and BHI's Conditions of Service.

Other Information	
Factors Relating to Customer Preferences or Input from Customers and Other Third Parties	
<p>The installation of new distribution transformers is driven by customer requests and projects are designed to meet their requirements. As per BHI’s recent customer engagement survey, customers were asked about the importance and appropriateness of planned System Access expenditures, which BHI is required to perform to connect customers to the distribution system. More than 91% of customers rated investment in these System Access projects as important and more than 84% rated proposed spending levels as appropriate.</p>	
Consideration of Non-Wires Solutions	
N/A	

Material Investment Summary Document

Program Name: Meters - New Connections

OEB Investment Category: System Access

General Information on Project

Overview This program includes expenditures for procurement and installation or replacement of revenue meters for new and existing customer connections to BHI's distribution system for retail settlement and billing purposes.

Scope and volume of work The scope of the program includes installation or replacement of single phase residential meters (both load and generation), 3 phase meters for commercial and small industrial customers (GS<50 kW), 3 phase meters for large commercial and industrial customers (GS>50 kW), Meters Inside the Settlement Timeframe (MIST) meters, and primary metering units for industrial customers. Metering installations associated with new customer connections and upgrades are completed in accordance with the requirements of the DSC and applicable regulations. The volume is driven entirely by customer demand.

Capital Investment	Program	2026	2027	2028	2029	2030
	Installed meters	\$408,000	\$428,480	\$450,925	\$472,834	\$496,800

Key Project Dates	Start Date:	January 1, 2026
	In-Service Date:	As required
	Expenditure Timing:	Timing based on customer demand
	Factors affecting the timing	Customer driven

Comparative historical information

Historical Program	2021	2022	2023	2024	2025 Fcst
Installed Meters	\$367,229	\$272,630	\$423,832	\$280,232	\$360,000

BHI's average annual expenditures for this program are expected to be \$340k from 2021 to 2025.

Investment Priority

The priority of this investment is high since it is driven by the need to provide customers with a timely service connection pursuant to BHI's mandated service obligation under the Electricity Act, the DSC and BHI's Conditions of Service.

For more details, see Sections 5.3.1.3.3 and 5.4.2.1 of the DSP.

Project Alternatives

- Design: Meter installations are driven by the specific requirements of the customer.
- Scheduling: Meters are installed in accordance with timelines for connecting customers as outlined in the DSC.

Evaluation Criteria and Information

Investment Need

The primary driver for this program is customer requests for new or upgraded connections to BHI's distribution system, which require the installation of meters for retail settlement and billing purposes.

Investment Justification

BHI is mandated to connect all customers under Section 3.1 of the DSC. Installations in this program adhere to Measurement Canada guidelines and provincial and regulatory mandates. BHI also participates in metering forums and working groups (i.e. GridSmartCity Metering group, Utilismart Users Working Group, and the Utility Standards Forum), which provide the opportunity to share and implement best practices. BHI stays current with changes and trends in metering communication technologies such as radio frequency and cellular technologies.

Efficiency

Installation of smart meters provides BHI and its customers with a number of efficiencies as compared to manual meter reading, such as reduced meter reading costs, improved power outage detection through meter "pinging", power verification that results in faster determination and resolution of problems at a customer's premises, more standardization and less varied meter types, and improved billing accuracy.

Customer Value

Smart meters provide the following customer benefits: real-time tracking of energy usage, more accurate billing, faster problem detection, and price plan optionality which provides them with the ability to make more informed decisions regarding their energy consumption and leverage newer functionality such as Green Button.

Reliability

Installation of new metering assets and wiring to current standards reduce the risk of meter failure, inaccuracies and outages due to failures. Meter data is also used to predict overloading situations that enable corrective action prior to failure.

Safety

Installation of new metering assets and wiring to current standards reduce the risk of electrical hazards. BHI incorporates standards and practices from the Canadian Standards Association (CSA) and the Institute of Electrical and Electronics Engineers (IEEE) into its own standards and complies with Ontario Regulation 22/04.

Cyber-Security and Privacy

BHI's metering infrastructure operates in a secure environment in accordance with the Ontario Cyber Security Framework.

Environmental Benefits

Metering technology and equipment complies with the provincial AMI specifications to enable Time of Use billing which can be leveraged to provide customers with tools to conserve electricity to facilitate demand reduction during peak hours.

Statutory/regulatory obligations

Expenditures in this program adhere to Measurement Canada regulations and mandated service obligation under the Electricity Act, the DSC and BHI's Conditions of Service.

Conservation and Demand Management

Customers have access to hourly consumption and price plan optionality, both of which can be leveraged to result in (i) a reduction in their overall energy use, (ii) a reduction in peak demand and total energy consumption and (iii) identification of inefficient usage patterns (such as lights or appliances left on unnecessarily). Smart meter data can also support improved decision making for customers that participate in CDM programs.

Benefits of innovative nature of project

N/A

Other Information**Factors Relating to Customer Preferences or Input from Customers and Other Third Parties**

Installation of new meters is driven by customer requests and projects are designed to meet their requirements. As per BHI's recent customer engagement survey, customers were asked about the importance and appropriateness of planned System Access expenditures, which BHI is required to perform to connect customers to the distribution system. More than 91% of customers rated investment in these System Access projects as important and more than 84% rated proposed spending levels as appropriate.

Consideration of Non-Wires Solutions

N/A

**Program Name:** Smart Meter Replacement/Reverification**OEB Investment Category:** System Access**General Information on Project****Overview**

This program involves replacement of end-of-life revenue meters with expiring seals. BHI cannot bill customers with expired seals pursuant to the Electricity Gas and Inspection Act and its regulations administered by Measurement Canada. Through these replacements, BHI plans to install next generation smart meters (referred to as Advanced Metering Infrastructure 2.0 ("AMI 2.0")), and upgrade supporting metering infrastructure as identified in the Material Investment Summary Document for the AMI Collector System.

BHI's existing Advanced Meter Infrastructure System ("AMI 1.0"), was implemented commencing in 2008 and has started to reach the end of its 15-year service life. Consequently, meter failures (primarily the loss of the ability of the meter to communicate) have increased beyond standard operating levels (1%) and meters are showing visible signs of disrepair. Meter failure projections based on annual failure trending indicate that 15% of BHI's meter population will have failed by the end of 2025.

High meter failure rates, without intervention, pose significant and critical risks to BHI's operations, affecting various aspects of its business including: non-compliance with the Electricity Gas and Inspection Act, and the OEB's Distribution System Code ("DSC"), associated customer dissatisfaction due to increased estimated bills and bill corrections, the inefficient reactive replacement of individual meters on a run-to-failure basis, and adverse operational consequences associated with technological obsolescence.

Installation of AMI 2.0 meters have a number of benefits including:

- faster and more reliable communication,
- enhanced security,
- better device management,
- supports more frequent reads which allows for better demand response, programs and customer energy usage insights in near real-time,
- interoperability and integration with DERS, EV chargers and smart home devices, and
- supports future smart grid applications

Scope and volume of work

BHI has approximately 46,000 residential, commercial and Metering Inside the Settlement Timeframe ("MIST") meters with expiring seals, or that will reach end-of-life, over the DSP horizon. BHI plans to replace these meters as part of its transition to AMI 2.0.

Capital Investment	Program	2026	2027	2028	2029	2030
	Smart Meter Replacement/Reverification	\$2,600,245	\$2,547,332	\$2,597,833	\$774,996	\$747,701
Key Project Dates	Start Date:	January 1, 2026				
	In-Service Date:	December 31, 2026				
	Expenditure Timing:	Jan 1 to Dec 31, 2026				
	Factors affecting the timing	Resource and material availability				
Comparative historical information Over the historical period, BHI’s approach to addressing meters with expiring seals has primarily been to extend seals through its sampling and reverification program. For the 2026-2030 rate period, BHI instead plans to replace meters as their current seal expires. A high proportion of these meters will also have reached the end of their useful life and as such, their digital components have deteriorated due to age and environmental conditions, failures rates have increased beyond standard operating levels, and they are showing visible signs of disrepair. BHI plans to replace these meters with AMI 2.0 (A4) meters which will mitigate failure risk and facilitate BHI’s transition to an AMI 2.0 system. A mass replacement such as this one has not been performed since 2008, when the AMI 1.0 system was implemented. The total expenditures per year for this program are directly correlated to the number of meters with expiring seals which will require replacement. Investment Priority The investment priority for this project is high since the major drivers for this project are regulatory compliance, billing accuracy, and reliability. Analysis of Project and Project Alternatives This project has three options for completion which are discussed in detail below: Option 1: <u>Reverify meters as they reach seal expiry</u> and only replace them if they fail reverification or fail in the field. Meters which have already been re-sealed will be allowed to reach the end of their 2 nd seal period, which may occur after the 2026-2030 rate period, and is generally beyond their 15-year useful life. This is not an optimal solution for the following reasons: <ul style="list-style-type: none">• Meter failures have increased beyond standard operating levels (1%) and meters are showing visible signs of disrepair.• BHI’s current supplier no longer manufactures the same meters and therefore replacing on a like-for-like basis is not possible.• Meters would remain in operation beyond their useful life, posing considerable operational, regulatory and financial risks.• This solution would delay BHI’s transition to AMI 2.0 and BHI would be unable to take advantage of the capabilities it provides. Option 2 (preferred option): <u>Replace meters as they reach seal expiry</u> and become due for reverification. This solution: <ul style="list-style-type: none">• Mitigates the risk of asset failures which have a significant negative impact on BHI’s operations, including lack of timely and accurate billing resulting in lower customer						

satisfaction, inability to meet the OEB-prescribed bill accuracy metric, and financial instability.

- Accelerates BHI's transition to the AMI 2.0 system and the capabilities it enables without replacing its entire fleet of legacy smart meters over five years, some prematurely (as discussed in Option 3). This also allows BHI to pace its meter replacements and future reverification cycles.

Option 3: Replace BHI's entire fleet of smart meters over the 2026-2030 DSP period. The replacement schedule would be identical to Option 2 for meters that become due for reverification by 2030 but would require the replacement of an additional 16,000 meters that become due for reverification, or reach the end of their useful life, beyond 2030. This option would be at an increased cost of approximately \$3M as compared to Option 2.

Evaluation Criteria and Information

Investment Need

The principal driver of this project is meters with expiring seals which are beyond or at the end of their service life. BHI cannot bill customers with expired seals pursuant to the Electricity Gas and Inspection Act and its regulations administered by Measurement Canada. It must either reverify or replace these meters before the seal period expires. In addition, BHI's current supplier no longer manufactures the legacy (AMI 1.0) meters and as such BHI has no option but to replace failed units with AMI 2.0 meters. A secondary driver of this project is to improve BHI's smart meter network and enable the smart meter AMI 2.0 features that the new A4 meters now have. This is aligned with BHI's AMI Collector system upgrade and subsequent head-end system upgrades to transition to a fully AMI 2.0 capable system.

Investment Justification

Expenditures in this project ensure compliance with regulatory requirements administered by Measurement Canada, and OEB service level requirements related to billing accuracy.

Efficiency

The project will support system operation efficiency by enabling faster meter communications, and more reliable and comprehensive meter data, with real-time data integrating with BHI's OMS and CIS.

Customer Value

Customers will benefit through the availability of real-time data in BHI's customer portal. They will also benefit from new programs that would allow them to utilize home analytics, vehicle to grid charging, battery storage and other DERs. In addition, AMI 2.0 meters will facilitate enhanced outage management and network operational efficiencies, and enable grid modernization, which customers have shown to be supportive of in customer engagement surveys.

Reliability

This project will help enable real-time data flow from smart meters which, when integrated into BHI's OMS and CIS, will assist BHI's operators with identifying and locating problems in the field more quickly and effectively. It will also enable more meter features such as 1min voltage profiles, which will help identify and analyze voltage spike/sag issues in the system.

Safety

N/A

Cyber-Security and Privacy

BHI's metering infrastructure operates in a secure environment in accordance with the Ontario Cyber Security Framework.

Environmental Benefits

N/A

Statutory/regulatory obligations

Expenditures in this program ensure compliance with the Electricity Gas and Inspection Act and its regulations administered by Measurement Canada, and with OEB requirements relating to billing accuracy.

Other Information**Factors Relating to Customer Preferences or Input from Customers and Other Third Parties**

As per BHI's recent customer engagement survey, customers were asked about the importance and appropriateness of planned System Access expenditures, which BHI is required to perform to connect customers to the distribution system and provide them service. More than 91% of customers rated investment in these System Access projects as important and more than 84% rated proposed spending levels as appropriate.

Consideration of Non-Wires Solutions

N/A

**Program Name:** Suite Metering**OEB Investment Category:** System Access**General Information on Project**

Overview This program includes expenditures for the procurement and installation of metering equipment in Multi-Unit Residential Buildings (MURBs). This program involves installing metering systems and configuring the communications network required to transmit meter data to facilitate retail settlement and billing. New suite metering connections are completed in accordance with the requirements of the Distribution System Code (DSC).

Scope and volume of work The scope of the program includes project engineering, project design, project management, material procurement (meters, current transformers, transponders, modems), meter commissioning and Measurement Canada S-E-O4 sealing requirements. BHI's suite metered technology complies with the requirements of the provincial Advanced Meter Infrastructure (AMI) specification. The volume of work is informed by the 10-year forecast for construction of MURBs in the City of Burlington, and any anticipated conversions of bulk-metered MURBs to suite-metering.

Capital Investment	Program	2026	2027	2028	2029	2030
	Suite Metering	\$609,323	\$587,340	\$553,842	\$630,536	\$643,356

Key Project Dates	Start Date:	January 1, 2026
	In-Service Date:	December 31, 2026
	Expenditure Timing:	Timing based on customer demand
	Factors affecting the timing	Occupancy or Construction Delays

Comparative historical Information

Program	2021	2022	2023	2024	2025 Fcst
Suite Metering	\$53,059	\$116,791	\$63,468	\$238,203	\$409,500

BHI's average annual net expenditure for this program was \$176k from 2021 to 2025. The net expenditures for the 2021-2025 period are lower than those expected during the 2026-2030 rate period due to a slower pace of construction, and delays caused by COVID-19. The increase over the DSP horizon is driven by provincial housing targets as mandated in the Province's More Homes Built Faster Act ("MHBFA"), and the City of Burlington and Halton Region's urban planning priorities - the majority of growth in Burlington is expected to be through "vertical growth" (i.e. MURBs).

Investment Priority

This is a mandatory investment pursuant to BHI's obligation to connect under Section 3.2 of the DSC.

For more details, see Sections 5.3.1.3.3 and 5.4.2.1 of the DSP.

Analysis of Project and Project Alternatives

Suite meter installations are driven by the specific requirements of the customer.

Effect of the investment on system operation efficiency and cost-effectiveness

- New suite metering connections do not have an impact on system operation efficiency or cost-effectiveness.

Net benefits accruing to customers

- Suite metered customers (i) have direct control over utility expenses, paying solely for personal consumption, (ii) have access to detailed usage data facilitating informed decisions regarding their energy usage; and (iii) may be eligible for conservation programs and rebates

Impact of the investment on reliability performance including frequency and duration of outages

- Installation of new metering assets and wiring to current standards reduces the risk of meter failure, inaccuracies and outages due to failures.

Project Alternatives

- An alternative to BHI suite metering is bulk metering, which involves installing a single meter for an entire building, capturing the collective consumption of all units. BHI bills the building owner or management based on this total usage. Subsequently, the owner or management apportions costs among residents either through an allocation method, or through the services of a Unit Sub Meter Provider ("USMP") which provides metering and billing services. For newly constructed buildings, the developer makes the decision on whether to suite-meter or bulk-meter the building. For existing bulk-metered buildings, the condominium board makes the decision to convert to suite metering.

Evaluation Criteria and Information**Investment Need**

The primary driver for this program is the construction of new multi-unit residential buildings in the City of Burlington, and any anticipated conversions of bulk-metered MURBs to suite-metering.

Investment Justification

BHI is mandated to complete new customer connections in accordance with the DSC..

Safety

BHI's suite meter technology complies with the requirements of the provincial AMI specification, the Electrical Safety Authority's (ESA's) Ontario Electrical Code, Ontario Regulation 22/04 and Measurement Canada standards.

Cyber-Security and Privacy

BHI utilizes best practices to seal and lock equipment to prevent physical tampering. BHI's metering infrastructure operates in a secure environment in accordance with the Ontario Cyber Security Framework.

Environmental Benefits

Metering technology and equipment complies with the provincial AMI specifications to enable Time of Use billing and provide customers with tools to conserve electricity for the purpose of demand reduction during peak hours.

Conservation and Demand Management

Residents are billed directly for their electricity use and as such are aware of their own consumption which can lead to (i) a reduction in overall energy use, (ii) a reduction in peak demand and total energy consumption, and (iii) identification of inefficient usage patterns (such as lights or appliances left on unnecessarily).

Other Information**Factors Relating to Customer Preferences or Input from Customers and Other Third Parties**

As per BHI's recent customer engagement survey, customers were asked about the importance and appropriateness of planned System Access expenditures, which BHI is required to perform to connect customers to the distribution system. More than 91% of customers rated investment in these System Access projects as important and more than 84% rated proposed spending levels as appropriate.

Consideration of Non-Wires Solutions

N/A

Material Investment Summary Document

Program Name: Subdivisions

OEB Investment Category: System Access

General Information on Project

Overview This program consists of capital expenditures in response to requests from developers to supply new infrastructure to service residential subdivisions (single family, semi-detached and townhouses). This program is customer driven, and expenditures include the costs associated with the installation of underground residential distribution infrastructure and transformers. Subdivision developments are typically constructed under the alternative bid option. Upon completion, BHI pays the developer a transfer price in accordance with Section 3.2 of the Distribution System Code (DSC). The forecasted number of services is based on historical trends and anticipated future developments. Expenditures in this program are mandatory due to BHI's obligations under the DSC and its Conditions of Service to connect new customers within its service territory.

Scope and volume of work On average approximately 300 new subdivision dwelling units are forecasted to be in service per year during the planning horizon. The number of units and load varies by project.

Capital Investment	Program	2026	2027	2028	2029	2030
	Subdivisions - Gross	\$2,789,700	\$2,808,000	\$2,864,700	\$2,921,400	\$2,980,800
	Subdivisions – Contr Capital	-\$2,040,000	-\$2,080,000	-\$2,122,000	-\$2,164,000	-\$2,208,000
	Subdivisions	\$749,700	\$728,000	\$742,700	\$757,400	\$772,800

Key Project Dates	Start Date:	Jan 1, 2026
	In-Service Date:	Dec 31, 2026
	Expenditure Timing:	Driven by subdivision developers

Factors affecting the timing

The following factors may impact the timing and/or priority of subdivision services:

- Developer schedule. BHI does not start construction until an Offer to Connect is issued and the deposit is paid by the developer. These activities are dependent on the developer and can impact the timing of the project. Further, BHI does not assume the assets and pay a transfer price until the project is completed to the proper design, and technical standards and specifications, which can impact the timing of capital expenditures.
- Available distribution system capacity to service the proposed subdivision development. BHI coordinates with the City of Burlington through the Site Plan Application (SPA) process to identify the areas slated for development and determine any necessary infrastructure enhancements or expansions required to service the project.
- Coordination with 3rd Parties – BHI coordinates with gas, water and communication companies to effectively manage these projects, including for any work planned on public rights of way. The timing of these projects can be impacted by the availability of design information from these 3rd parties.
- Resource availability. The timing of these developer driven requests does not occur evenly throughout the year, which can impact the start time and duration of the project, dependent upon the availability of

BHI's internal resources and contractors. BHI mitigates delays through ongoing communication with stakeholders and effective project management.

Comparative historical Information

Program	2021	2022	2023	2024	2025 Fcst
Subdivisions - Gross	\$0	\$7,827	\$0	\$1,560,369	\$2,735,000
Subdivisions - Contr Capital	\$0	\$0	\$0	-\$1,188,182	-\$2,000,000
Subdivisions - Net	\$0	\$7,827	\$0	\$372,187	\$735,000

Program expenditures fluctuate based on the date of subdivision completion, capital costs and load. BHI's forecasted expenditures are higher than historical years due to a higher number of subdivisions expected to be completed during the DSP period, as compared to 2021-2024. These numbers are based on developments that are currently under construction or in the SPA process with the City of Burlington.

Investment Priority

This is a mandatory investment pursuant to BHI's obligation to connect under Section 3.2 of the DSC. For more details, see Sections 5.3.1.3.3 and 5.4.2.1 of the DSP.

Analysis of Project and Project Alternatives

New subdivisions are designed to meet the specific requirements of the developer. Project alternatives are limited as design and servicing options are standardized in accordance with BHI's policies and practices.

- **Effect of the investment on system operation efficiency and cost-effectiveness**
 - New distribution infrastructure added to BHI's distribution system as a result of this program will increase the number of assets included in inspection, maintenance and testing programs. This puts upward pressure on system O&M costs.
 - The installation of underground cable vs. overhead wires avoids future operating and maintenance costs associated with tree contacts, animal contacts, weather-related events and issues associated with clearance allowances for buildings and signs.
- **Net benefits accruing to customers**

New customers benefit from having a distribution system that is modern, reliable, efficient and built to current standards.
- **Impact of the investment on reliability performance including frequency and duration of outages**

Reliability for the specific assets being installed is expected to be the same or better than BHI's average since the probability of equipment failure is lower with new equipment. Similarly, reliability for new underground assets is expected to be the same or better than that with overhead assets due to the use of a loop system, and installation of assets below grade which reduces outages due to tree contacts, animal contacts, and weather-related events
- **Project Alternatives**

The options for design alternatives are limited to underground supply because the City of Burlington and Halton Region both require underground utility service for all new residential subdivisions (i.e. overhead installation is not an option).

Evaluation Criteria and Information

Investment Need

The primary driver for this program is requests from developers to supply new infrastructure to serve residential subdivisions (single family, semi-detached and townhouses). BHI is currently aware of 16 subdivisions at various stages of approval, ranging from initial consultation to active construction. This translates to approximately 300 new subdivision dwelling units forecasted to be built per year during the 2026-2030 rate term.

Investment Justification

BHI is mandated to connect all new subdivisions under Section 3.2 of the DSC. New subdivisions are designed based on BHI's standards, Conditions of Service and requirements from other authorities such as the City of Burlington, Halton Region and the MTO. BHI regularly updates its construction standards to reflect any changes in Canadian Standard Association (CSA) standards and incorporate new materials (e.g. transformers, switchgear, etc.).

Efficiency

New Subdivisions are serviced using high-efficiency transformers with lower losses than standard transformers.

Reliability

Reliability for the specific assets being installed is expected to be the same or better than BHI's average since the probability of equipment failure is lower with new equipment and the installation of assets below grade reduces or avoids outages due to tree contacts, animal contacts, and weather-related events. All new subdivisions with more than one transformer are on a loop system (which provides redundancy in the event of any failure as power can be supplied to customers from either direction) and cables are installed in concrete encased ducts (vs. direct buried).

Environmental Benefits

New Subdivisions are serviced using high-efficiency transformers with lower losses than standard transformers. They are also fitted with an internal current limiting fuse to prevent rupturing of the transformer tank in the event of a failure. This mitigates potential oil spills from failed transformers.

Statutory/regulatory obligations

This is a mandatory investment pursuant to BHI's obligation to connect under Section 3.2 of the DSC.

Other Information

Factors Relating to Customer Preferences or Input from Customers and Other Third Parties

As per BHI's recent customer engagement survey, customers were asked about the importance and appropriateness of planned System Access expenditures, which BHI is required to perform to connect customers to the distribution system. More than 91% of customers rated investment in these System Access projects as important and more than 84% rated proposed spending levels as appropriate.

Installation of new subdivision infrastructure is driven by developer requests and projects are designed to meet their requirements. Developers are involved in the design process from the beginning of the project, and BHI considers requirements from, and coordinates with, other authorities such as the City of Burlington, Halton Region, and the MTO.



Program Name: Major Transit Station Area Development (Aldershot GO)

OEB Investment Category: System Access

General Information on Project

Overview	The City of Burlington Growth Framework outlines a plan to concentrate population and housing growth in areas around the Aldershot GO, Burlington GO and Appleby GO stations in order to meet Provincial housing targets. The Major Transit Station Area (MTSA) projects are driven by BHI’s mandatory service obligations to connect and serve expected growth in these areas, where capacity shortfalls currently exist. Program expenditures include the installation of new feeders and extension of existing feeders including all associated electrical distribution infrastructure (i.e. overhead high voltage switches and pad mounted high voltage switchgears) to address capacity shortfalls. The capacity shortfall to serve the Aldershot MTSA is based on known developments identified through the City of Burlington’s Site Plan Approval (SPA) process, including 20 new high-rise and mid-rise buildings comprising 7,500 new units.						
Scope and volume of work	Installation of new feeders and extension of existing feeders to bring the required capacity to the Aldershot GO MTSA. This includes approximately 6.5 km (Phase 1 & 2) of new distribution lines including some underground components. It will require a significant QEW (6 lane) highway crossing and multiple railway line crossings. Phase 1 will include the upgrade of an existing 1-Circuit 27.6kV line to a 3-Circuit 27.6 kV line on North Service Rd, from East of King Rd to Waterdown Rd (south of Hwy 403). Phase 2 will include the upgrade of an existing 1-Citrcuit 27.6 kV Power Line to a 2-Circuit Power Line on Plains Rd, from King Rd to Waterdown Rd.						
Capital Investment	Program	2026	2027	2028	2029	2030	
	Major Transit Station Area Development (Aldershot Go) - Gross	\$2,794,643	\$2,849,440	\$1,453,488	\$3,763,283	\$2,559,867	
	Major Transit Station Area Development (Aldershot Go) - Capital Contr	-\$1,537,054	-\$1,567,192	-\$799,419	-\$2,069,806	-\$1,407,927	
	Major Transit Station Area Development (Aldershot Go) - Net	\$1,257,589	\$1,282,248	\$654,070	\$1,693,477	\$1,151,940	
Key Project Dates	Start Date:			Jan 1, 2026			
	In-Service Date:			Dec 31, 2026			
	Expenditure Timing:			Q1: \$314,397, Q2: \$314,397, Q3: \$314,397, Q4: \$314,398			

Factors affecting the timing

- Developer schedule: BHI does not start construction until a signed Offer to Connect is received and the deposit is paid by the developer. These activities are dependent on the developer and can impact the timing of the project.
- Available distribution system and feeder capacity to service the proposed development: BHI coordinates with the City of Burlington through the SPA to identify the areas slated for development and determine any necessary infrastructure enhancements or expansions required to service the project.
- Coordination with third Parties: BHI coordinates with gas, water and communication companies, to effectively manage these projects, including for any work planned on public rights of way. The timing of these projects can be impacted by the availability of design information from these third parties.
- Resource availability. The timing of these developer driven requests does not occur evenly throughout the year, which can impact the start time and duration of the project, dependent upon the availability of BHI's internal resources and contractors. BHI mitigates delays through ongoing communication with stakeholders and effective project management.

Comparative historical Information

Forecasted expenditures are based on estimates completed by an external design consultant with experience on large expansion projects like this one, including projects with complex highway and railway crossings.

Economic Evaluation

Economic Evaluations are completed in accordance with Appendix B and Section 3.2 of the DSC including new provisions announced December 23, 2024¹.

Investment Priority

This is a mandatory investment pursuant to BHI's obligation to connect under section 3.2 of the DSC.

Analysis of Project and Project Alternatives

New developments are designed to meet the specific requirements of that development. Project alternatives are limited as design and servicing options are standardized in accordance with BHI's policies and practices.

- **Effect of the investment on system operation efficiency and cost-effectiveness**
New distribution infrastructure added to BHI's distribution system as a result of this program will increase the number assets included in inspection, maintenance and testing programs. This puts upward pressure on system O&M costs.
- **Net benefits accruing to customers**
New customers benefit from having a distribution system that is modern, reliable, efficient and built to current standards.
- **Impact of the investment on reliability performance including frequency and duration of outages**
Reliability for the specific assets being installed is expected to be the same or better than BHI's average since the probability of equipment failure is lower with new equipment.

¹ EB-2024-0092

- **Project Alternatives**

The options for design alternatives in some portions of the expansion are limited to underground supply due to City of Burlington and Halton Region requirements. Overhead Power Line construction is approximately 6 times less expensive than Underground Power Line construction. The final installation method will depend on City of Burlington and Halton Region Right of Way (ROW) Municipal Consent approvals, including approvals from the MTO, CN and Metrolinx.

Innovative Nature of Project

N/A

Leave to Construct Approval

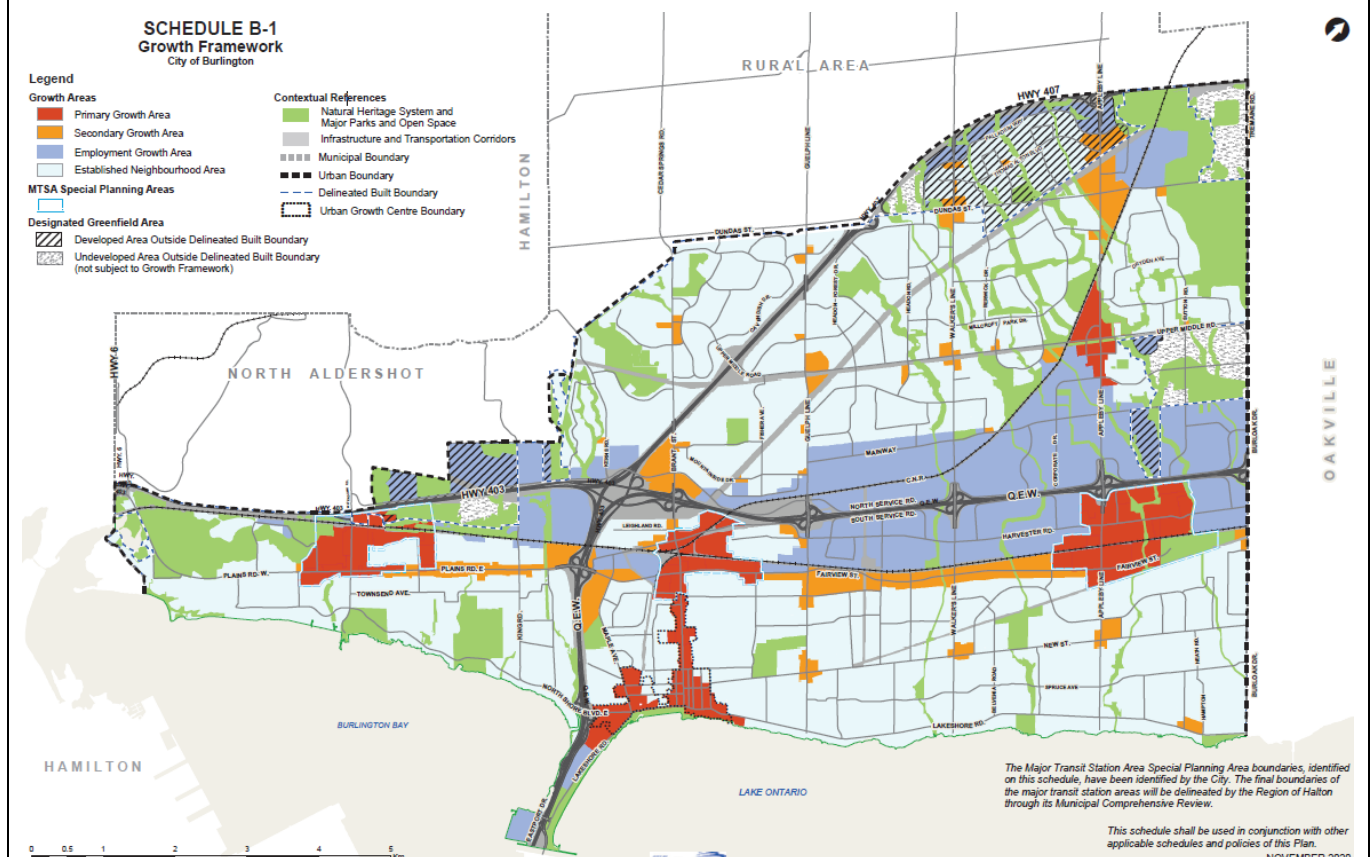
N/A

Evaluation Criteria and Information

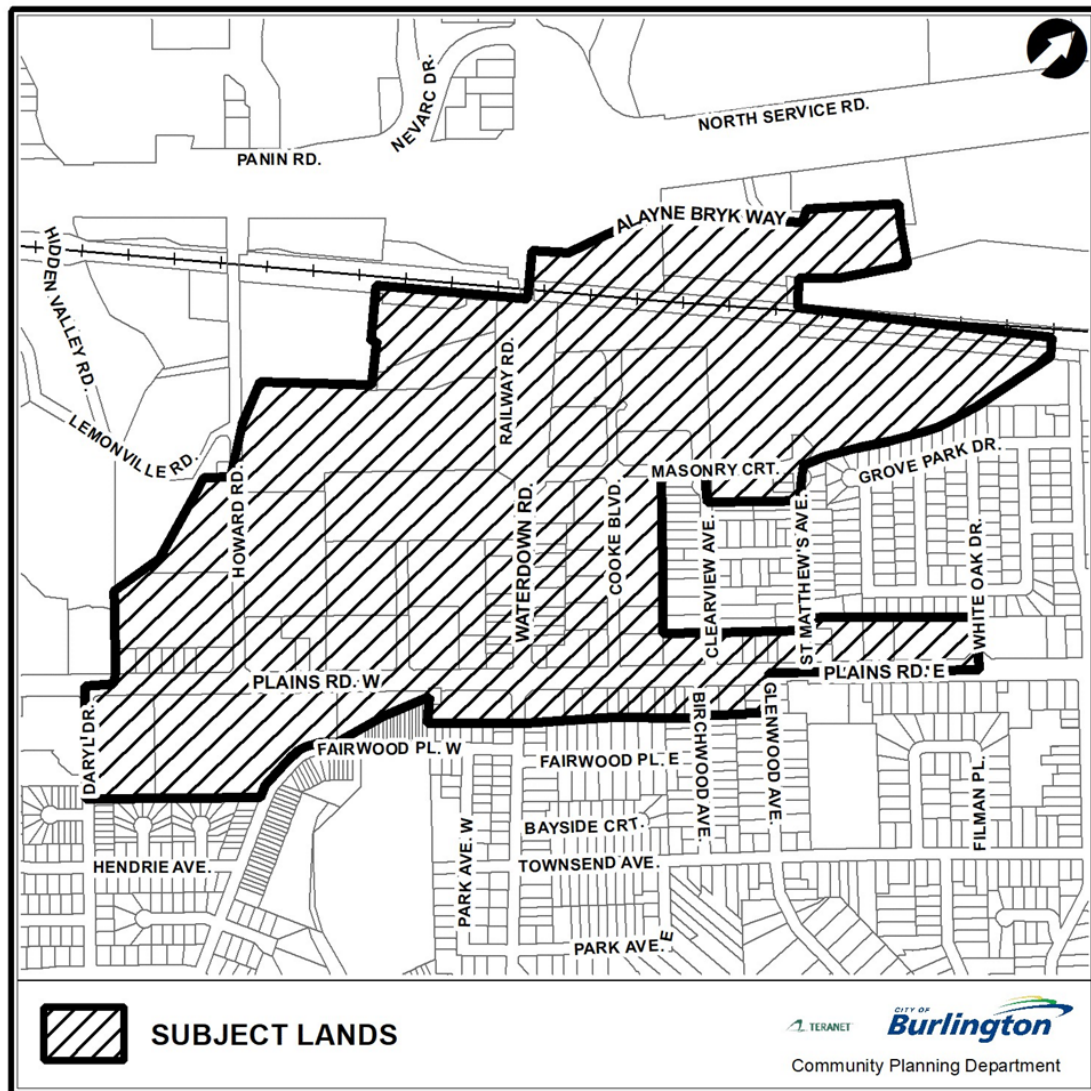
Investment Need

The MTSA projects are driven by BHI's mandatory service obligations to connect and serve expected growth in these areas, where capacity shortfalls currently exist.

As identified in the figure below, the City of Burlington Growth Framework outlines a plan to concentrate population and housing growth in areas around the Aldershot GO, Burlington GO and Appleby GO stations in order to meet Provincial housing targets.



The below figure shows the Aldershot GO MTSA boundaries, which are expected to include 20 new high-rise and mid-rise buildings comprising 7,500 new units.



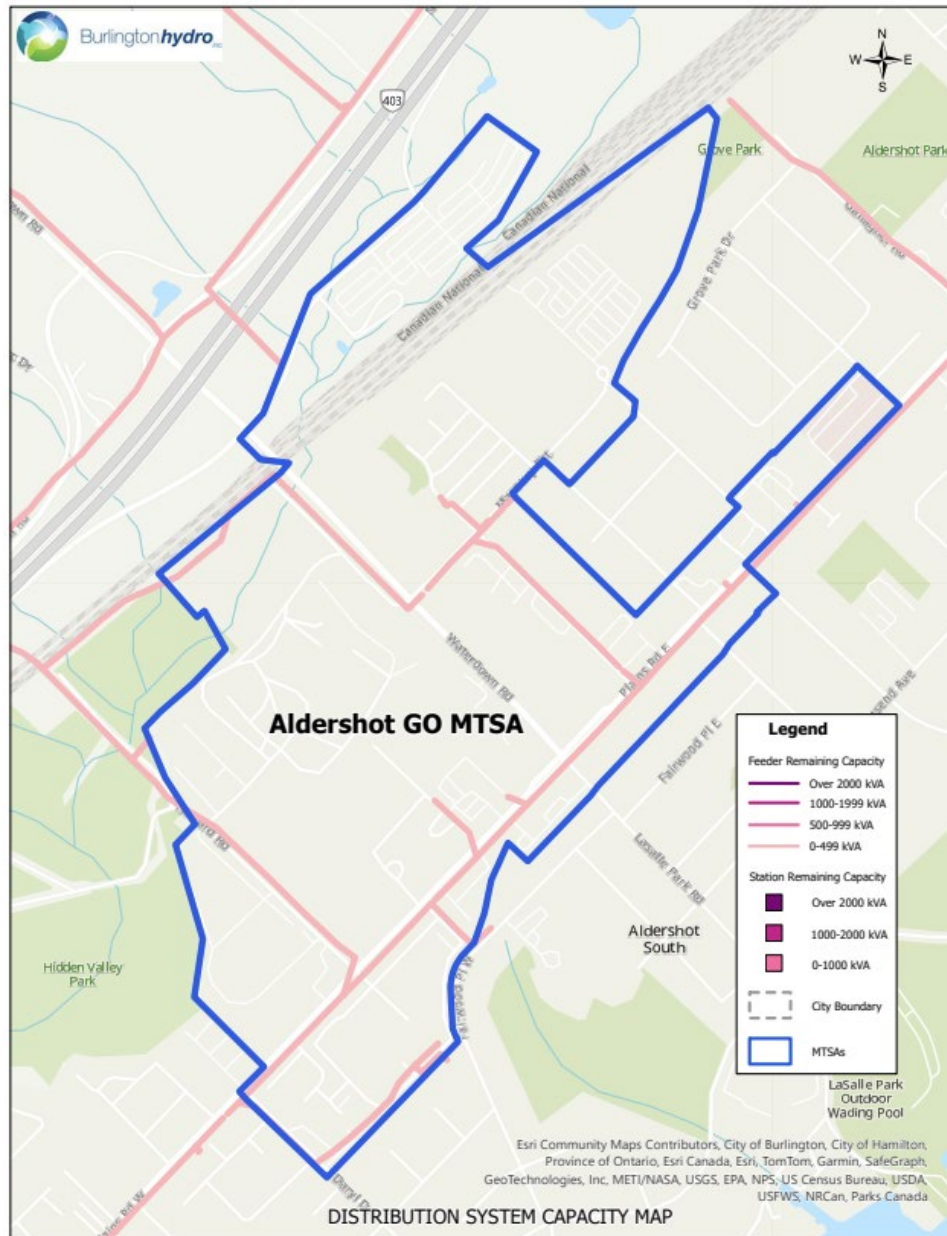
Any new development in the City of Burlington must complete the SPA process that identifies to BHI the electrical infrastructure needs based on anticipated demand, and the timelines required to connect these developments. In the absence of existing infrastructure that can accommodate new load, BHI identifies system expansion requirements to bring capacity to these developments and reflects the associated expenditures in its capital budget.

BHI is aware of 34 multi-unit residential developments in and around MTSA's through the City of Burlington's planning department. BHI is aware of an additional 53 multi-unit residential buildings in development outside of the three MTSA zones. These developments are in various stages of the SPA process; however, in BHI's experience most of these developments are approved if they adhere to City policies and guidelines. BHI sources additional information directly from developers, which has identified additional residential projects above

those that are identified through the SPA process. This allows BHI to plan its system to serve future customers in these high growth and intensification areas.

Upon reviewing its existing system capacity in these areas, BHI determined that these developments are currently supplied by old 4.16kV and constrained 13.8kV and/or 27.6kV systems, which can only accommodate general load growth such as small service upgrades, new in-fill residential connections and small general service connections without impacting system performance and reliability. Due to the expected load growth in the MTSAs, the existing infrastructure will not have the capacity to necessary to meet system needs.

Aldershot GO MTSA is serviced via BHI's older 4.16kV and 27.6kV systems, which can only accommodate general load growth. Only two 27.6kV feeders are available in the area (existing loop system) and there is insufficient capacity to accommodate the proposed new load, as identified in the Aldershot GO MTSA Capacity Map below. The expected capacity shortfall for this MTSA is 25-30 MVA based on the expected number of buildings and units.



BHI is planning to develop and build the new 27.6KV system in phases over the 2026-2030 rate term to ensure capacity is available when required, while maintaining system reliability and availability for existing customers. The developments in the MTSA growth areas have to be connected to the 27.6kV voltage because of their capacity requirements and to facilitate load balancing and load transfers from other feeders for reliability purposes. BHI expects to receive capital contributions from these developments (as identified in the Capital Investment section of this MISD), in accordance with the economic evaluation methodology provided in Appendix B of the DSC.

Investment Justification

The investment need is determined by the estimated capacity shortfall (25-30MVA). Forecasted expenditures to meet this investment need are based on estimates completed by an external design consultant with experience on large expansion projects like this one.

Efficiency

Connecting new developments to higher distribution voltage can lead to lower lines losses.

Customer Value

New customers benefit from having a distribution system that is modern, reliable, efficient and built to current standards.

Reliability

Reliability for the specific assets being installed is expected to be the same or better than BHI's average since the probability of equipment failure is lower with new equipment.

Statutory/regulatory obligations

This is a mandatory investment pursuant to BHI's obligation to connect under section 3.2 of the DSC.

Other Information**Factors Relating to Customer Preferences or Input from Customers and Other Third Parties**

As per BHI's recent customer engagement survey, customers were asked about the importance and appropriateness of planned System Access expenditures, including expansion projects to accommodate population growth MTSA's. More than 91% of customers rated investment in these System Access projects as important and more than 84% rated proposed spending levels as appropriate.

Installation of new distribution infrastructure to serve new developments (including condominium buildings, subdivisions, commercial & industrial services) is driven by developer requests and projects are designed to meet their requirements. Developers are involved in the design process from the beginning of the project and are given options (where applicable) based on BHI's standards, Conditions of Service and requirements from other authorities such as the City of Burlington, Halton Region, and the MTO.

Consideration of Non-Wires Solutions

BHI has considered the applicability of non-wires solutions (NWS) for the MTSA (Aldershot GO) system expansion project, which exceeds the \$2 million threshold. Based on the below assessment, NWS is not a viable alternative.

The forecasted demand increase requires system expansion that provides reliable and scalable capacity. Non-wires alternatives such as Conservation and Demand management (CDM) or distributed energy resources (DERs) are not practical, as they would either fail to provide the necessary capacity or require complex and costly modifications to the existing network. Further, the project involves extending the physical infrastructure to serve new customers, a requirement that cannot be met through NWS.



Program Name: Major Transit Station Area Development (Burlington GO)

OEB Investment Category: System Access

General Information on Project

Overview The City of Burlington Growth Framework outlines a plan to concentrate population and housing growth in areas around the Aldershot GO, Burlington GO and Appleby GO stations in order to meet Provincial housing targets. The Major Transit Station Area (MTSA) projects are driven by BHI's mandatory service obligations to connect and serve expected growth in these areas, where capacity shortfalls currently exist.

Program expenditures include the installation of new feeders and extension of existing feeders including all associated electrical distribution infrastructure (i.e. overhead high voltage switches and pad mounted high voltage switchgears) to address capacity shortfalls. The capacity shortfall to serve the Burlington GO MTSA is based on known developments identified through the City of Burlington's Site Plan Approval (SPA) process, including 15 new high-rise and mid-rise buildings comprising 4,000 new units.

Scope and volume of work Installation of new feeders and extension of existing feeders to bring the required capacity to Burlington GO MTSA. This includes approximately 3.0km (Phases 1, 2 & 3) of 27.6kV Circuits including some underground components. It will require a significant highway 407 crossing and multiple railway line crossings.

Phase 1 will include the expansion of 1-Circuit 27.6kV along Fairview Street, from Burlington GO Station to Drury Lane.

Phase 2 will include the expansion/installation of 1-Circuit 27.6 kV Feeder along Fairview Street from Drury Lane to Guelph Line and include railway line crossings.

Phase 3 will include the upgrade of an existing 2-Circuits 27.6kV along Guelph Line from Dundas Road to Reservoir Municipal Station (South of 407) including a re-build of an existing Highway 407 crossing.

Capital Investment	Program	2026	2027	2028	2029	2030
	Major Transit Station Area Development (Burlington Go) - Gross	\$2,188,240	\$2,327,960	\$1,061,095	\$5,253,579	\$3,573,599
	Major Transit Station Area Development (Burlington Go) - Capital Contri	-\$1,203,532	-\$1,280,378	-\$583,602	-\$2,889,469	-\$1,965,480
	Major Transit Station Area Development (Burlington Go) - Net	\$984,708	\$1,047,582	\$477,493	\$2,364,111	\$1,608,120

Key Project Dates	Start Date:	Jan 1, 2026
	In-Service Date:	Dec 31, 2026
	Expenditure Timing:	2026-Q1: \$246,177, Q2: \$246,177, Q3: \$246,177, Q4: \$246,177
<p>Factors affecting the timing</p> <ul style="list-style-type: none"> • Developer schedule: BHI does not start construction until a signed Offer to Connect is received and the deposit is paid by the developer. These activities are dependent on the developer and can impact the timing of the project. • Available distribution system and feeder capacity to service the proposed development: BHI coordinates with the City of Burlington through the SPA to identify the areas slated for development and determine any necessary infrastructure enhancements or expansions required to service the project. • Coordination with third Parties: BHI coordinates with gas, water and communication companies, to effectively manage these projects, including for any work planned on public rights of way. The timing of these projects can be impacted by the availability of design information from these third parties. • Resource availability. The timing of these developer driven requests does not occur evenly throughout the year, which can impact the start time and duration of the project, dependent upon the availability of BHI's internal resources and contractors. BHI mitigates delays through ongoing communication with stakeholders and effective project management. <p>Comparative historical Information</p> <p>Forecasted expenditures are based on estimates completed by an external design consultant with experience on large expansion projects like this one, including projects with complex highway and railway crossings.</p> <p>Economic Evaluation</p> <p>Economic Evaluations are completed in accordance with Appendix B and Section 3.2 of the DSC including new provisions announced December 23, 2024¹.</p> <p>Investment Priority</p> <p>This is a mandatory investment pursuant to BHI's obligation to connect under section 3.2 of the DSC.</p> <p>Analysis of Project and Project Alternatives</p> <p>New developments are designed to meet the specific requirements of that development. Project alternatives are limited as design and servicing options are standardized in accordance with BHI's policies and practices.</p> <ul style="list-style-type: none"> • Effect of the investment on system operation efficiency and cost-effectiveness New distribution infrastructure added to BHI's distribution system as a result of this program will increase the number assets included in inspection, maintenance and testing programs. This puts upward pressure on system O&M costs. • Net benefits accruing to customers 		

¹ EB-2024-0092

New customers benefit from having a distribution system that is modern, reliable, efficient and built to current standards.

- **Impact of the investment on reliability performance including frequency and duration of outages**

Reliability for the specific assets being installed is expected to be the same or better than BHI's average since the probability of equipment failure is lower with new equipment.

- **Project Alternatives**

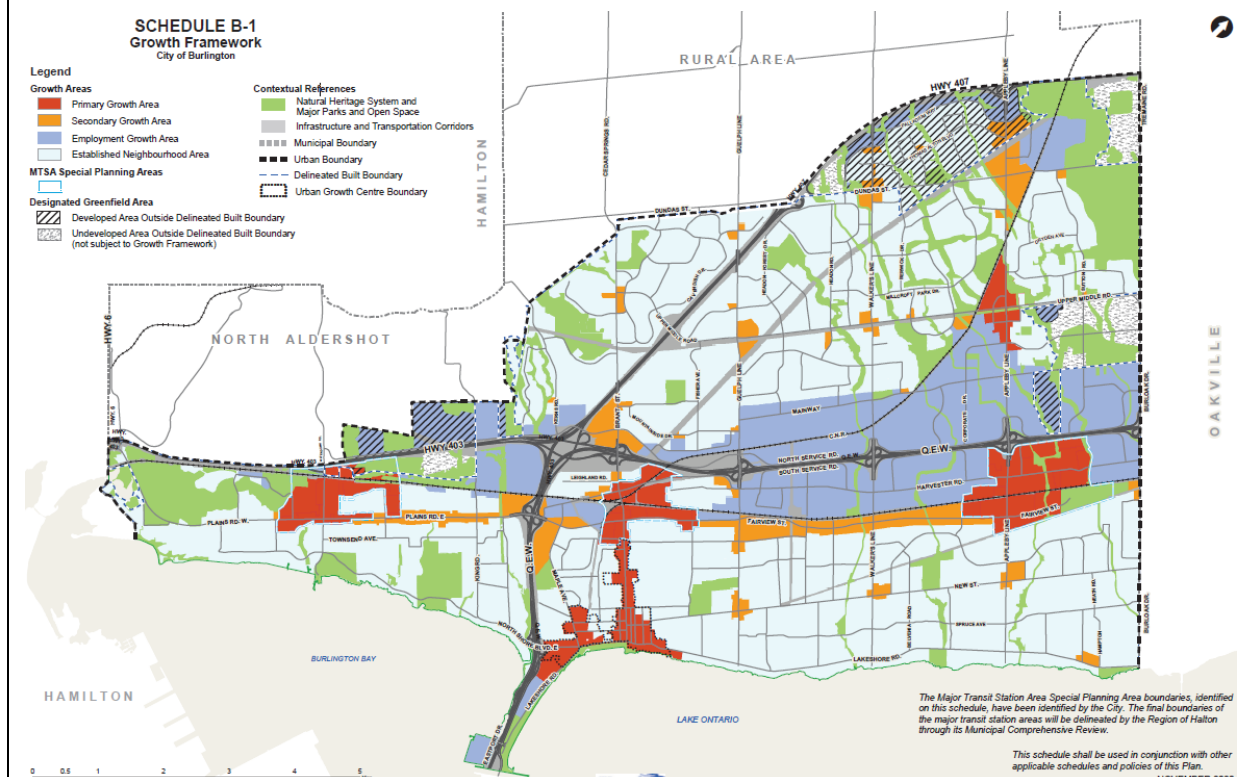
The options for design alternatives in some portions of the expansion are limited to underground supply due to City of Burlington and Halton Region requirements. Overhead Power Line construction is approximately 6 times less expensive than Underground Power Line construction. The final installation method will depend on City of Burlington and Halton Region Right-of Way (ROW) Municipal Consent approvals, including approvals from the MTO and CN.

Evaluation Criteria and Information

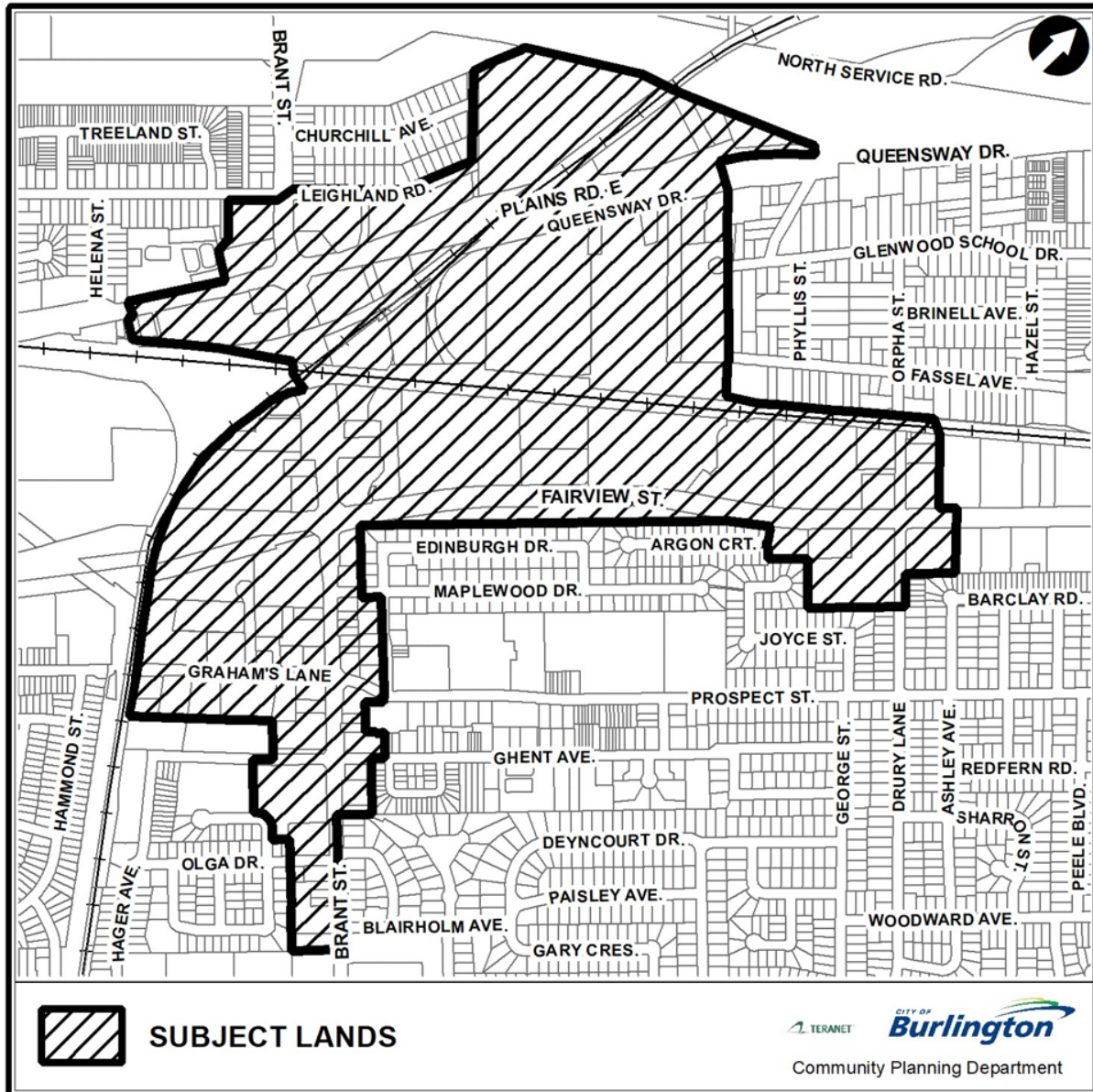
Investment Need

The MTSA projects are driven by BHI's mandatory service obligations to connect and serve expected growth in these areas, where capacity shortfalls currently exist.

As identified in the figure below, the City of Burlington Growth Framework outlines a plan to concentrate population and housing growth in areas around the Aldershot GO, Burlington GO and Appleby GO stations in order to meet Provincial housing targets.



The below figure shows the Burlington GO MTSA boundaries, which are expected to include 15 new high-rise and mid-rise buildings comprising 4,000 new units.



Any new development in the City of Burlington must complete the Site Plan Approval process that identifies to BHI the electrical infrastructure needs based on anticipated demand, and the timelines required to connect these developments. In the absence of existing infrastructure that can accommodate new load, BHI identifies system expansion requirements to bring capacity to these developments and reflects the associated expenditures in its capital budget.

BHI is aware of 34 multi-unit residential developments in and around MTSA zones through the City of Burlington's planning department. BHI is aware of an additional 53 multi-unit residential buildings in development outside of the three MTSA zones. These developments are in various stages of the SPA

process; however, in BHI's experience most of these developments are approved if they adhere to City policies and guidelines. BHI sources additional information directly from developers, which has identified additional residential projects above those that are identified through the SPA process. This allows BHI to plan its system to serve future customers in these high growth and intensification areas.

Upon reviewing its existing system capacity in these areas, BHI determined that these developments are currently supplied by old 4.16kV and constrained 13.8kV and/or 27.6kV systems, which can only accommodate general load growth such as small service upgrades, new in-fill residential connections and small general service connections without impacting system performance and reliability. Due to the expected load growth in the MTSA's, the existing infrastructure will not have the capacity to necessary to meet system needs.

Burlington GO MTSA is serviced via BHI's older 4.16kV system and 27.6kV system which can only accommodate general load growth. Only one 27.6kV radial feeder is available in the area and there is insufficient capacity to accommodate the proposed new load, as identified in the Burlington GO MTSA Capacity Map below. The expected capacity shortfall for this MTSA is 15-20 MVA based on the expected number of buildings and units.

Efficiency

Connecting new developments to higher distribution voltage can lead to lower lines losses.

Customer Value

New customers benefit from having a distribution system that is modern, reliable, efficient and built to current standards.

Reliability

Reliability for the specific assets being installed is expected to be the same or better than BHI's average since the probability of equipment failure is lower with new equipment.

Statutory/regulatory obligations

This is a mandatory investment pursuant to BHI's obligation to connect under section 3.2 of the DSC.

Other Information**Factors Relating to Customer Preferences or Input from Customers and Other Third Parties**

As per BHI's recent customer engagement survey, customers were asked about the importance and appropriateness of planned System Access expenditures, including expansion projects to accommodate population growth MTSA's. More than 91% of customers rated investment in these System Access projects as important and more than 84% rated proposed spending levels as appropriate.

Installation of new distribution infrastructure to serve new developments (including condominium buildings, subdivisions, commercial & industrial services) is driven by developer requests and projects are designed to meet their requirements. Developers are involved in the design process from the beginning of the project and are given options (where applicable) based on BHI's standards, Conditions of Service and requirements from other authorities such as the City of Burlington, Halton Region, and the MTO.

Consideration of Non-Wires Solutions

BHI has considered the applicability of non-wires solutions (NWS) for the MTSA (Burlington GO) system expansion project, which exceeds the \$2 million threshold. Based on the below assessment, NWS is not a viable alternative.

The forecasted demand increase requires system expansion that provides reliable and scalable capacity. Non-wires alternatives such as Conservation and Demand Management (CDM) or distributed energy resources (DERs) are not practical, as they would either fail to provide the necessary capacity or require complex and costly modifications to the existing network. Further, the project involves extending the physical infrastructure to serve new customers, a requirement that cannot be met through NWS.

Program Name: Major Transit Station Area Development (Appleby GO)

OEB Investment Category: System Access

General Information on Project

Overview	<p>The City of Burlington Growth Framework outlines a plan to concentrate population and housing growth in areas around the Aldershot GO, Burlington GO and Appleby GO stations in order to meet Provincial housing targets. The Major Transit Station Area (MTSA) projects are driven by BHI's mandatory service obligations to connect and serve expected growth in these areas, where capacity shortfalls currently exist.</p> <p>Program expenditures include the installation of new feeders and extension of existing feeders including all associated electrical distribution infrastructure (i.e. overhead high voltage switches and pad mounted high voltage switchgears) to address capacity shortfalls. The capacity shortfall to serve the Appleby GO is based on known developments identified through the City of Burlington's Site Plan Approval (SPA) process, including 68 new high-rise and mid-rise buildings comprising 20,000 new units.</p>
Scope and volume of work	<p>Installation of new feeders and extension of existing feeders to bring the required capacity to the Appleby MTSA.</p> <p>This includes approximately 4.5 km (Phases 1 & 2) of new distribution lines including some underground components. Phases 3 & 4 include approximately 8.0 km of new distribution lines including some underground components and it will also require multiple railway lines crossings.</p> <p>Phase 1 will include Tremaine TS egress/expansion and construction of 2 x 27.6kV Circuits across Dundas Street. The new circuits will connect to the available capacity at Tremaine TS via existing breaker positions.</p> <p>Phase 2 will include an upgrade of an existing distribution line through the existing corridor through Bronte Park (existing 1 x 26.7kV overhead line) to bring 4 x 27.6kV overhead feeders from Dundas Road to Burloak Road. This new distribution line will require a new 4-Circuit crossing across Bronte Creek.</p> <p>Phase 3 will include Tremaine TS feeder expansion along Burloak /Harvester /Appleby to Fairview Street. This project involves upgrading the existing 2x27.6kV OH line to accommodate additional 2 feeders, including railway lines crossing to Fairview Street.</p> <p>Phase 4 will include Cumberland TS feeders upgrades along Harvester Rd/Walkers Ln/Fairview St, from the HONI Right-of-Way (ROW) at Harvester Rd to Appleby Ln, including railway crossing at Walkers Line. The project includes upgrading an existing 2 x 27.6KV OH pole line to accommodate additional 1 x 27.6 KV feeder, including railway lines crossing, to Appleby Line.</p>

Capital Investment	Program	2026	2027	2028	2029	2030
	Major Transit Station Area Development (Appleby Go) - Gross	\$2,556,377	\$2,993,277	\$1,329,566	\$3,684,024	\$4,205,754
	Major Transit Station Area Development (Appleby Go) - Capital Contr	-\$1,406,007	-\$1,646,302	-\$731,262	-\$2,026,213	-\$2,313,165
	Major Transit Station Area Development (Appleby Go) - Net	\$1,150,369	\$1,346,974	\$598,305	\$1,657,811	\$1,892,589
Key Project Dates	Start Date:	Jan 1, 2026				
	In-Service Date:	Dec 31, 2030				
	Expenditure Timing:	2026-Q1: \$287,592, Q2: \$287,592, Q3: \$287,592, Q4: \$287,593				
	Factors affecting the timing	Program expenditures are customer driven				
Factors affecting the timing <ul style="list-style-type: none">Developer schedule. BHI does not start construction until a signed Offer to Connect is received and the deposit is paid by the developer. These activities are dependent on the developer and can impact the timing of the project.Available distribution system and feeder capacity to service the proposed development: BHI coordinates with the City of Burlington through the SPA to identify the areas slated for development and determine any necessary infrastructure enhancements or expansions required to service the project.Coordination with 3rd Parties – BHI coordinates with gas, water and communication companies, to effectively manage these projects, including for any work planned on public rights of way. The timing of these projects can be impacted by the availability of design information from these 3rd parties.Resource availability. The timing of these developer driven requests does not occur evenly throughout the year, which can impact the start time and duration of the project, dependent upon the availability of BHI’s internal resources and contractors. BHI mitigates delays through ongoing communication with stakeholders and effective project management.						
Comparative historical Information <p>Forecasted expenditures are based on estimates completed by an external design consultant with experience on large expansion projects like this one, including projects with complex railway crossings.</p>						
Economic Evaluation <p>Economic Evaluations are completed in accordance with Appendix B and section 3.2 of the DSC including new provisions announced December 23, 2024¹.</p>						
Investment Priority <p>This is a mandatory investment pursuant to BHI’s obligation to connect under section 3.2 of the DSC.</p>						
Analysis of Project and Project Alternatives <p>New developments are designed to meet the specific requirements of that development. Project alternatives are limited as design and servicing options are standardized per BHI’s policies and practices.</p>						

¹ EB-2024-0092

- **Effect of the investment on system operation efficiency and cost-effectiveness**

New distribution infrastructure added to BHI's distribution system as a result of this program will increase the number assets included in inspection, maintenance and testing programs. This puts upward pressure on system O&M costs.

- **Net benefits accruing to customers**

New customers benefit from having a distribution system that is modern, reliable, efficient and built to current standards.

- **Impact of the investment on reliability performance including frequency and duration of outages**

Reliability for the specific assets being installed is expected to be the same or better than BHI's average since the probability of equipment failure is lower with new equipment.

- **Project Alternatives**

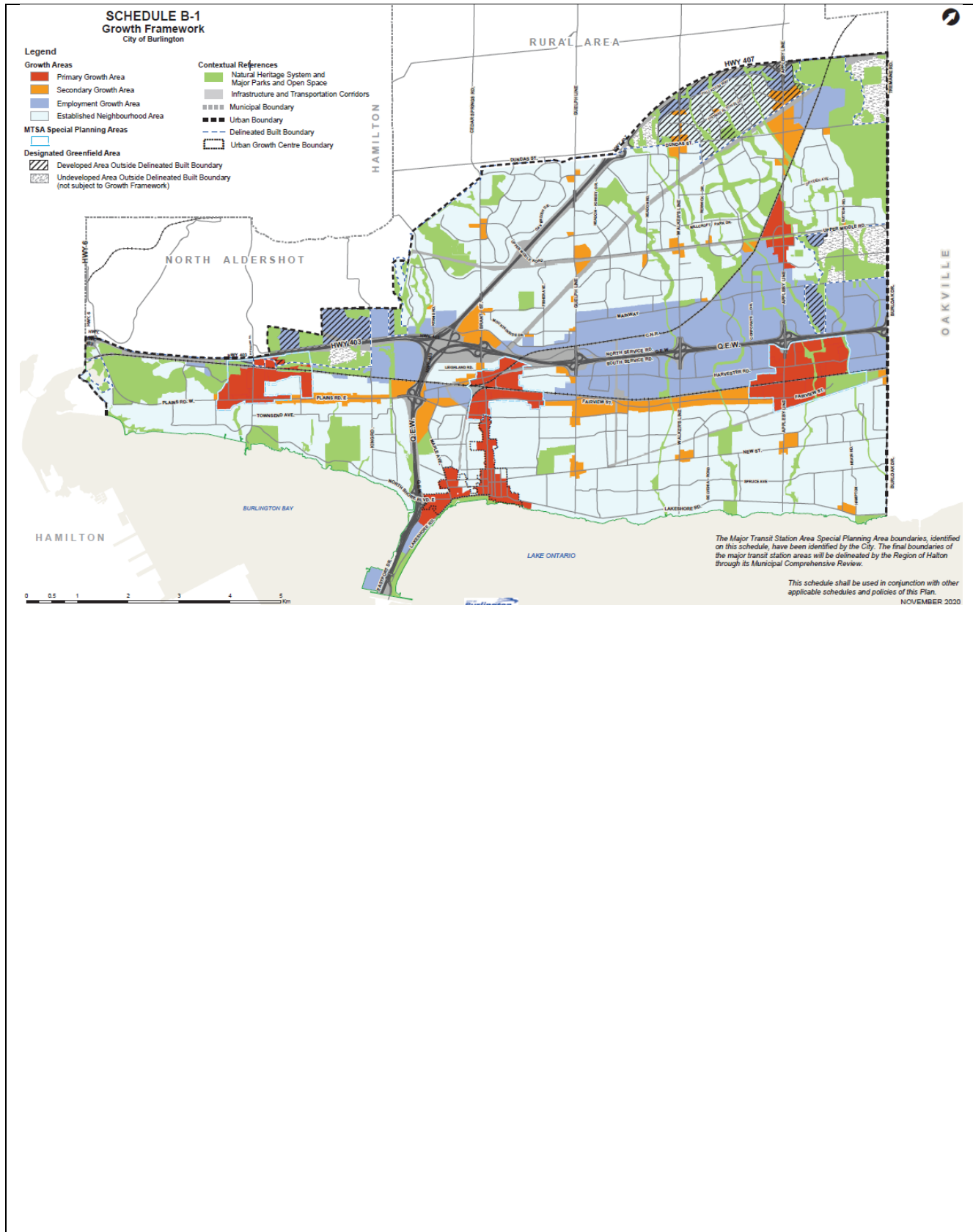
The options for design alternatives in some portions of the expansion are limited to underground supply due to City of Burlington and Halton Region requirements. Overhead Power Line construction is significantly less expensive than Underground Power Line construction. The final installation method will depend on City of Burlington and Halton Region ROW Municipal Consent approvals, including approvals from the MTO, CN and Metrolinx.

Evaluation Criteria and Information

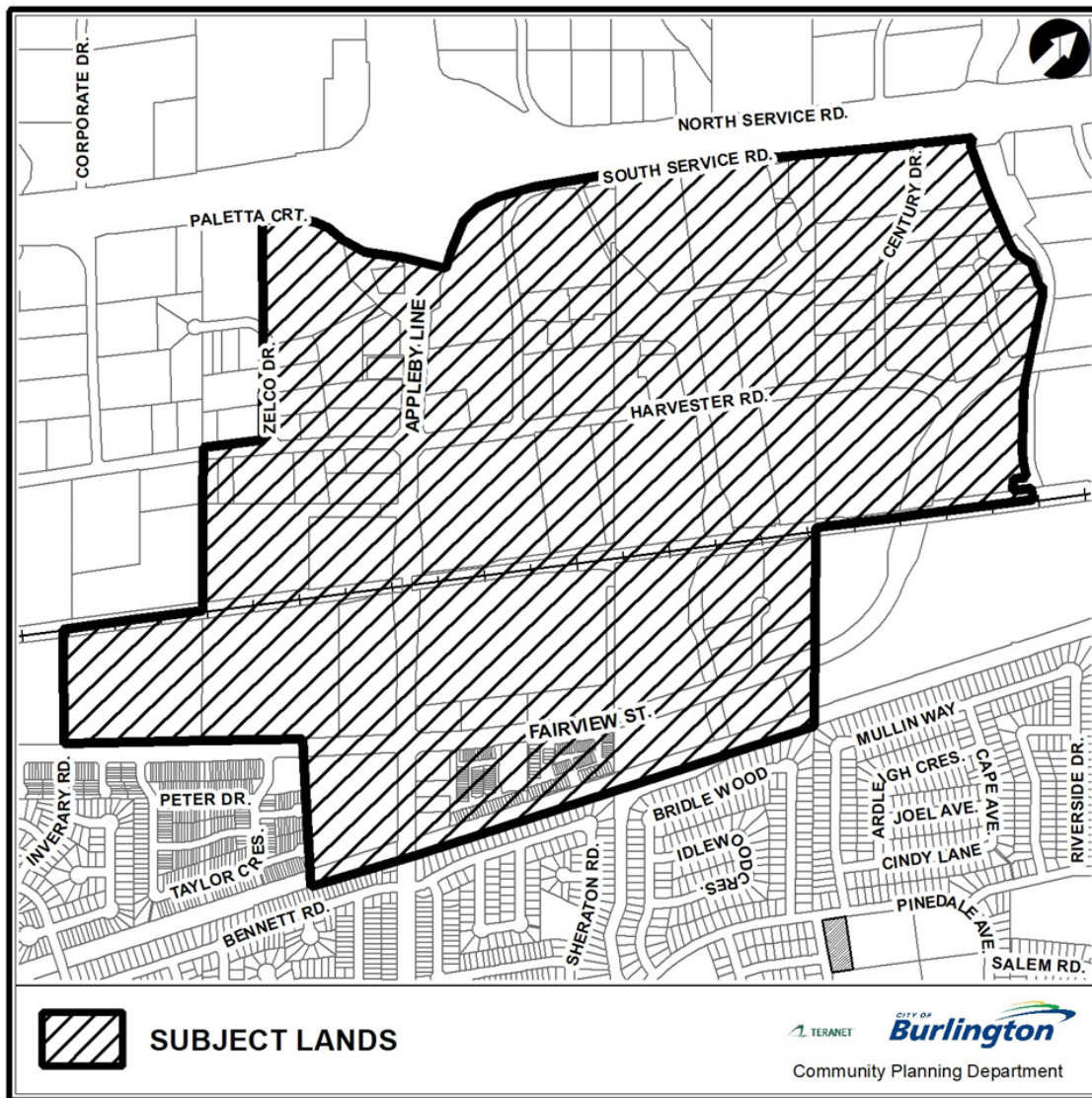
Investment Need

The MTSA projects are driven by BHI's mandatory service obligations to connect and serve expected growth in these areas, where capacity shortfalls currently exist.

As identified in the figure below, the City of Burlington Growth Framework outlines a plan to concentrate population and housing growth in areas around the Aldershot GO, Burlington GO and Appleby GO stations in order to meet Provincial housing targets.



The figure below shows the Appleby GO MTSA boundaries, which are expected to include 68 new high-rise and mid-rise buildings comprising 20,000 new units.

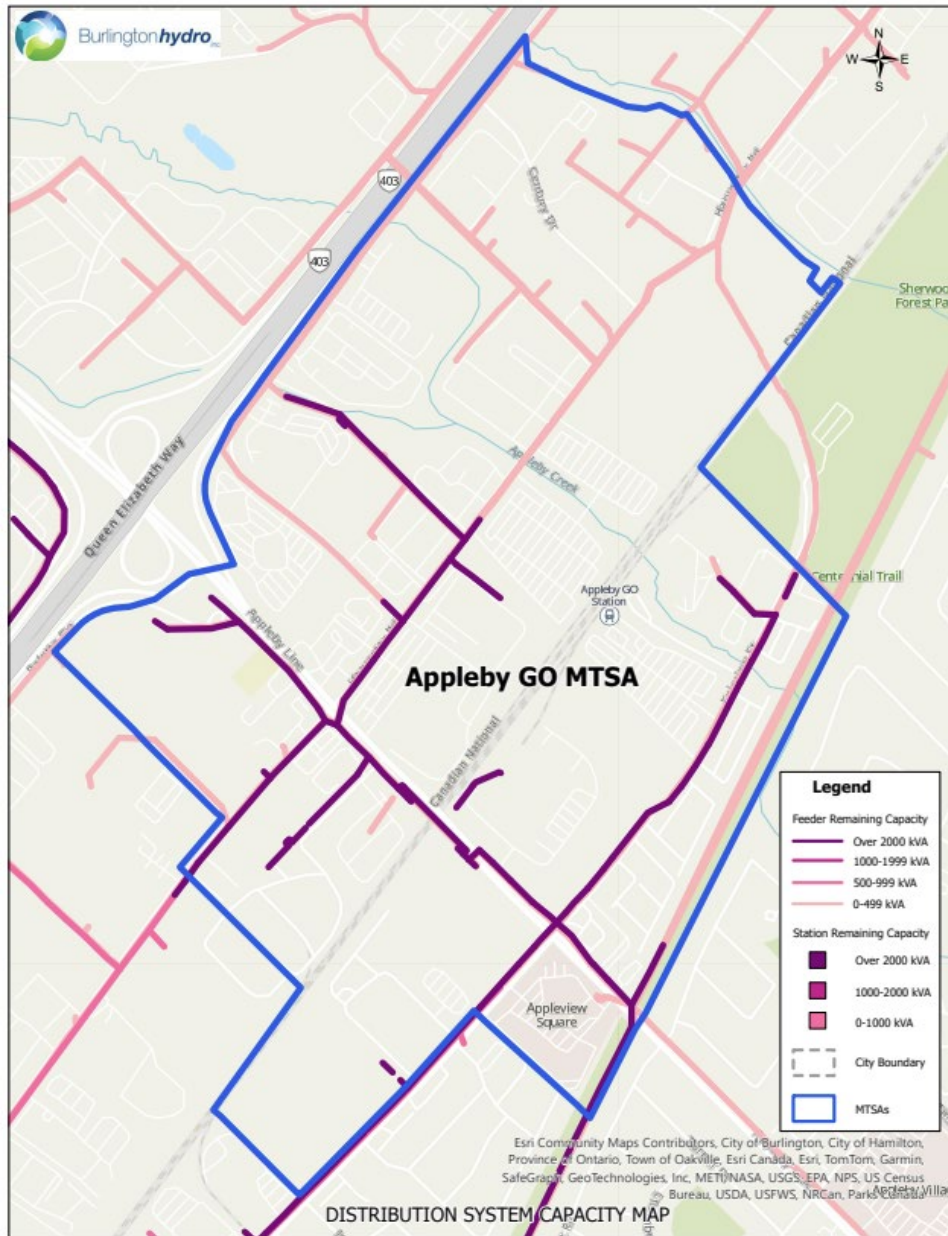


Any new development in the City of Burlington must complete the SPA process that identifies to BHI the electrical infrastructure needs based on anticipated demand, and the timelines required to connect these developments. In the absence of existing infrastructure that can accommodate new load, BHI identifies system expansion requirements to bring capacity to these developments and reflects the associated expenditures in its capital budget.

BHI is aware of 34 multi-unit residential developments in and around MTSA's through the City of Burlington's planning department. BHI is aware of an additional 53 multi-unit residential buildings in development outside of the three MTSA zones. These developments are in various stages of the SPA process; however, in BHI's experience most of these developments are approved if they adhere to City policies and guidelines. BHI sources additional information directly from developers, which has identified additional residential projects above those that are identified through the SPA process. This allows BHI to plan its system to serve future customers in these high growth and intensification areas.

Upon reviewing its existing system capacity in these areas, BHI determined that these developments are currently supplied by old 4.16kV and constrained 13.8kV and/or 27.6kV systems, which can only accommodate general load growth such as small service upgrades, new in-fill residential connections and small general service connections without impacting system performance and reliability. Due to the expected load growth in the MTSAs, the existing infrastructure will not have the capacity to necessary to meet system needs.

Appleby GO MTSA is serviced via BHI's older 13.8kV system and 27.6kV system which can only accommodate general load growth. Only three 27.6kV feeders are available in the area and there is insufficient capacity to accommodate the proposed new load, as identified in the Appleby GO MTSA Capacity Map below. The expected capacity shortfall for this MTSA is 60-70MVA based on the expected number of buildings and units.



BHI is planning to develop and build the new 27.6KV system in phases over the 2026-2030 rate term to ensure capacity is available when required while maintaining system reliability and availability for existing customers. The developments in the MTSA growth areas have to be connected to the 27.6kV voltage because of their capacity requirements and to facilitate load balancing and load transfers from other feeders for reliability purposes. BHI expects to receive capital contributions from these developments (as identified in the Capital Investment section of this MISD), in accordance with the economic evaluation methodology provided in Appendix B of the DSC.

Investment Justification

The investment need is determined by the estimated capacity shortfall (60-70MVA). Forecasted expenditures to meet this investment need are based on estimates completed by an external design consultant with experience on large expansion projects like this one.

Efficiency

Connecting new developments to higher distribution voltage can lead to lower lines losses.

Customer Value

New customers benefit from having a distribution system that is modern, reliable, efficient and built to current standards.

Reliability

Reliability for the specific assets being installed is expected to be the same or better than BHI's average since the probability of equipment failure is lower with new equipment.

Statutory/regulatory obligations

This is a mandatory investment pursuant to BHI's obligation to connect under section 3.2 of the DSC.

Other Information**Factors Relating to Customer Preferences or Input from Customers and Other Third Parties**

As per BHI's recent customer engagement survey, customers were asked about the importance and appropriateness of planned System Access expenditures, including expansion projects to accommodate population growth MTSA's. More than 91% of customers rated investment in these System Access projects as important and more than 84% rated proposed spending levels as appropriate.

Installation of new distribution infrastructure to serve new developments (including condominium buildings, subdivisions, commercial & industrial services) is driven by developer requests and projects are designed to meet their requirements. Developers are involved in the design process from the beginning of the project and are given options (where applicable) based on BHI's standards, Conditions of Service and requirements from other authorities such as the City of Burlington, Halton Region, and the MTO.

Consideration of Non-Wires Solutions

BHI has considered the applicability of non-wires solutions (NWS) for the MTSA (Appleby GO) system expansion project, which exceeds \$2 million threshold. Based on the below assessment, NWS is not a viable alternative.

The forecasted demand increase requires system expansion that provides reliable and scalable capacity. Non-wires alternatives such as Conservation and Demand Management (CDM) or distributed energy resources (DERs) are not practical, as they would either fail to provide the necessary capacity or require complex and costly modifications to the existing network. Further, the project involves extending the physical infrastructure to serve new customers, a requirement that cannot be met through NWS.

**Program Name:** Underground Rebuilds**OEB Investment Category:** System Renewal**General Information on Project****Overview**

The Underground Rebuild program manages the replacement and rejuvenation (through cable injection) of underground primary cable in very poor and poor condition across BHI's service territory. BHI owns approximately 686 km of underground primary cables, of which 159 km (23%) are in very poor condition and 68 km (10%) are in poor condition based on BHI's Asset Condition Assessment (ACA)¹. The deteriorating condition of these cables increases their likelihood of failure, which has a direct impact on system reliability.

Underground primary cables transmit electricity along the electrical distribution system and are typically more reliable than overhead cables since they are not exposed to severe weather conditions, tree contacts or foreign interference. However, relative to overhead cables, distribution underground cable materials and installation are more expensive, and faults can be difficult to locate and repair, usually resulting in lengthier outages for customers. Primary cables in subdivisions were originally installed as direct-buried cables, and as such, replacing them involves digging along the whole length of the cable.

The Underground Rebuilds program also includes emergency replacement of secondary cables in the event of faults.

BHI utilizes an advanced, non-degrading cable testing method to assess the robustness of older cables. Specific recommendations for future cable replacements or cable rejuvenation are made based on the results of this testing. Cable rejuvenation primarily focuses on voids, defects, and water trees within cable insulation to fill the gaps and reduce the chance of cable faults while extending the asset life of cables, which BHI reviews on a case-by-case basis.

Underground primary cables are replaced proactively due to the high impact on outage duration if a failure occurs, as finding and replacing or repairing faulted underground primary cables is time and labour intensive. Replacement cables are installed in ducts to facilitate easier access to the cables in the future. BHI prioritizes replacement in areas with segments where two or more faults have occurred, as these segments will create damage in adjacent segments if they fail again.

This program enables BHI to proactively plan and manage the replacement and rejuvenation of deteriorated underground primary cables to avoid asset failures and the negative reliability impacts they can cause.

¹ DSP Appendix I

Scope and volume of work	BHI is targeting to replace ~26km, and perform cable rejuvenation on ~50km, of underground primary cables over the 2026 to 2030 period. BHI is piloting the cable injection program in 2025 and dependent upon its initial success, as measured by no repeat failures of injected sections, it plans to extend the scope of the program in 2027-2030. This will enable BHI to address more lengths of failed underground primary cable as compared to a 100% replacement strategy, and defer their replacement to future years. The candidacy for cable injection is based on the results of cable testing, which is a pre-requisite for injection. The testing identifies candidate sections of the cables that are in poor condition and don't have limiting factors (such as a high number of splices) that would make them poor candidates for injection. Cables that are not good candidates for injections must be replaced.					
Capital Investment	Program	2026	2027	2028	2029	2030
	UG Rebuilds	\$2,091,000	\$2,132,000	\$2,175,050	\$2,218,100	\$2,263,200
Key Project Dates	Start Date:	Jan 1, 2026				
	In-Service Date:	Dec 31, 2026				
	Expenditure Timing:	Q1: \$522K, Q2: \$522K, Q3: \$525K, Q4: \$522K				
Factors affecting the timing The highest risk to the scheduled completion of this program is the emergence of unplanned, high priority projects which results in resources being diverted away from proactive replacement and rejuvenation projects. BHI mitigates this risk through its asset management process (described in section 5.3.1 of the DSP), implementing the highest priority investments earlier in the year and making best efforts to defer the lowest priority investments if resources must be allocated to unplanned work.						
Comparative historical Information						
Program		2021	2022	2023	2024	2025 Fcst
UG Rebuild		\$815,152	\$999,997	\$1,974,672	\$1,281,919	\$1,050,000
On average, BHI has spent \$1.2M per year to replace approximately 3.8km of cable including both proactive and emergency replacements. BHI is proposing to increase expenditure levels to expand the scope of this program, as more of this underground infrastructure is deteriorating (approximately 226km of primary underground cable is in poor or very poor condition) and failing. BHI plans to replace an average of 5.2 km of cable per year and perform cable rejuvenation on an additional 9.3km of cable per year over the DSP period to address the increasing trend in the number of cable failures over the past five years as identified below.						
Number of Cable Faults per Year						
2020	2021	2022	2023	2024		
20	25	33	37	23		
Investment Priority This project was assessed using BHI's project prioritization tool based on its impact on each asset management objective. The project was ranked as the 3 rd highest priority project out of 52 projects. The ranking is driven by high reliability impacts if the asset is not replaced and fails.						
Further details are provided in Sections 5.3.1.3.3 and 5.4.2.1 of the DSP.						

Analysis of Project and Project Alternatives

Alternatives for cable replacements include: (i) proactive replacement, (ii) cable rejuvenation, and (iii) reactive replacement (i.e., run-to-failure and replace on an emergency basis). Proactively replacing or rejuvenating these assets before they fail is the most prudent investment decision and in the best interest of BHI and its customers. BHI has considered, among others, the following aspects as part of its alternatives analysis:

- **Effect of the investment on system operation efficiency and cost-effectiveness**
 - Proactive replacement of end-of-life underground primary cables is more cost effective than reactive replacement, as identified in Table 5.2-6 of the DSP:
 - it can be planned to minimize overtime (premium) hours
 - it is less disruptive to other ongoing projects
 - it can be difficult to identify where a cable fault has occurred, resulting in longer outage durations and higher average replacement costs.
 - Rejuvenation of underground primary cables can be performed at a lower cost than replacement. In addition, asset useful life is extended which defers capital replacement
- **Impact of the investment on reliability performance including frequency and duration of outages**
 - Proactive replacements and rejuvenation may reduce frequency and duration of unplanned outages due to asset failure.
- **Replacement Alternatives**

BHI is considering cable injection (rejuvenation) as another alternative to cable replacement and a pilot program is planned for implementation in 2025. Cable injections primarily focus on voids, defects, and water trees within cable insulation to fill the gaps and reduce the chance of cable faults while extending the asset life of cables.

Cable replacement remains the preferred alternative over rejuvenation where (i) cables have reached end-of-life (i.e., a number of faults have occurred and have been repaired), (ii) no accessibility issues exist (e.g. direct buried cables under train tracks or protected lands etc.) and (iii) there have been three or more splices which precludes the use of cable injection as an alternative.

Evaluation Criteria and Information

Investment Need

The primary driver for this investment is assets at the end of their service life. BHI identifies cables for replacement or rejuvenation based on condition and replaces them, or plans to rejuvenate them, proactively due to the potential reliability impact if failure occurs.

Investment Justification

BHI has an ongoing annual process to assess, prioritize and replace deteriorated underground primary cables, which mitigates the reliability risk associated with operating assets in very poor or poor condition. BHI relies on cable testing results to help identify cables at highest risk of failure and prioritizes areas with segments where two or more faults have occurred, as these segments will create

damage in adjacent segments if they fault again. Replacement cables are installed in ducts to facilitate easier access to the cables in the future.

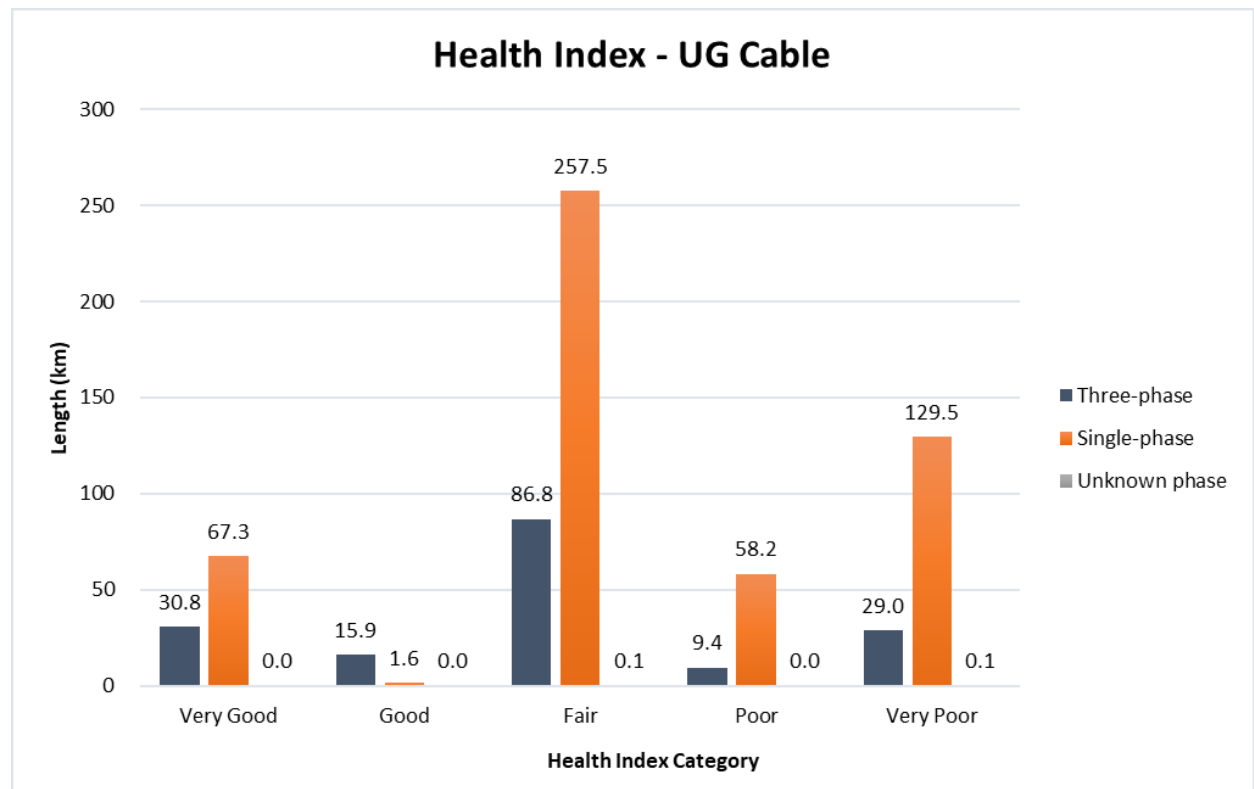
Asset Performance Target and Asset Lifecycle Optimization

This program supports the following performance measures:

- System Reliability: proactively replacing assets at the end of their service lives reduces the risk of an outage caused by asset failure.
- Customer Satisfaction: as the risk of asset failure decreases, the risk of outages decreases. Reliability is a top priority for BHI customers.
- Cost Metrics: proactive replacements are more cost effective than reactive replacements; and cable rejuvenation (where applicable) is an even more cost-effective means of reducing the risk of asset failure.
- Asset Performance: improved asset condition will facilitate better asset performance.

Asset Condition Relative to Typical Life Cycle

Primary underground cable is flagged for intervention based on the results of the ACA², which assesses the condition of BHI's cable based on field testing, outage records, and service age. Field testing seeks to identify crushed insulation, terminal spacing problems, stray wire strands or braided shielding, and conductive or corrosive contaminants around the cables. Approximately 226km (33%) of BHI's three-phase and single-phase primary underground cables are in very poor or poor condition, which is driving the need for this program.



² DSP Appendix I

Customer Impact and Risk

Typically, anywhere from 12 to 154 customers may be directly impacted by a primary cable failure; however, the failure could lead to higher customer impact if the cable is not part of the loop configuration which allows for an alternate source of supply as load can be fed from the other direction. A traditional radial system does not have this flexibility. If end of life cable is not replaced or rejuvenated, the risk of unplanned outages and outage duration may increase, resulting in lower customer satisfaction. This can also compromise customer confidence in the reliability of the distribution system. BHI's replacement and rejuvenation program will mitigate this risk.

Like-for-Like Renewal Analysis

BHI does not replace underground cables on a like-for-like basis. Direct buried cables are replaced with cables in ducts in accordance with current standards, and for ease of future maintenance and repairs.

Other Information**Factors Relating to Customer Preferences or Input from Customers and Other Third Parties**

Through BHI's recent customer engagement process, more than 90% of customers across all rate classes said they support BHI's strategy of investing in proactively replacing deteriorated infrastructure as needed, based on its condition and likelihood to fail.

Customers were also asked about the importance and appropriateness of planned System Renewal expenditures, including replacement/rejuvenation of underground primary cable to reduce the risk of outages due to cable failure. More than 93% of customers rated investment in System Renewal as important and more than 87% rated proposed spending levels as appropriate.

Consideration of Non-Wires Solutions

N/A



Material Investment Summary Document

Program Name: Pole Replacement Program

OEB Investment Category: System Renewal

General Information on Project

Overview This program manages the replacement and/or reinforcement of wood poles across BHI's service territory. Wood poles are an integral part of BHI's distribution system as they support the structure for overhead distribution lines and are often equipped with assets such as overhead transformers, switches, reclosers, and streetlights. BHI does not run poles to failure, and instead proactively plans and manages the replacement or reinforcement of deteriorated poles, due to the potential negative impact to reliability and safety when failure occurs. Wood poles are identified for replacement based on the results of the BHI's Asset Condition Assessment ("ACA")¹, which assesses the condition of BHI's poles based on remaining strength, wood rot, mechanical defects, out of plumb, and service age. Table 5.3-14 of the Distribution System Plan ("DSP") provides condition data on wood poles.

Scope and volume of work BHI plans to replace 104 poles per year during the 2026-2030 period based on the ACA. In addition, a further 50 poles a year will be reinforced through the use of PoleEnforcer², as a cost-effective alternative to full replacement. PoleEnforcer is a proprietary groundline reinforcement which stabilizes poles with significant base rot, extending their lifespan and deferring replacement.

Capital Investment	Program	2026	2027	2028	2029	2030
	Pole Replacement	\$1,581,000	\$1,612,000	\$1,644,550	\$1,677,100	\$1,711,200

Key Project Dates	Start Date:	Jan 1, 2026
	In-Service Date:	Dec 31, 2026
	Expenditure Timing:	Q1: \$395,250; Q2: \$395,250; Q3: \$395,250 Q4: \$395,250
	Factors affecting the timing:	Resource availability

Comparative historical information

Program	2021	2022	2023	2024	2025 Fcst
Pole Replacement Program	\$1,117,942	\$1,092,660	\$1,390,655	\$1,631,007	\$1,050,000

BHI's average annual expenditures for this program for 2021-2025 is expected to be \$1.25M with an average of 87 poles replaced per year. BHI is proposing to increase the pacing of this program to replace/reinforce more poles in very poor and poor condition over the five-year DSP horizon to mitigate the risk of failure, operate safely, avoid a backlog of poles in very poor and poor condition, and balance customers' preferences for affordability and reliability.

Investment Priority

This annual program was assessed using BHI's project prioritization tool described in section 5.3.1.3.3 based on its impact on each asset management objective. The project was ranked as the 4th highest priority project

¹ DSP Appendix I

² [PoleEnforcer Brochure 11-15.pdf](#)

out of 52 projects. The ranking is driven by high reliability impacts as well as public and employee safety impacts if the asset is not replaced and fails.

For more details, see Sections 5.3.1.3.3 and 5.4.2.1 of the DSP.

Analysis of Project and Project Alternatives

Alternatives for pole replacements include: (i) proactive replacement, (ii) reinforcement for poles with significant base rot, or (iii) reactive replacement (i.e., run-to-failure and replace on an emergency basis). Proactively replacing or reinforcing these assets before they fail is the most prudent investment decision and in the best interest of BHI and its customers. BHI has considered, among others, the following aspects as part of its alternatives analysis:

- **Effect of the investment on system operation efficiency and cost-effectiveness**
 - Proactive replacement of end-of-life poles as compared to reactive replacement is less disruptive to other ongoing projects as they can be scheduled to minimize service disruptions.
 - Reinforcement for poles stabilizes poles with significant base rot, at a lower cost than replacement, extending their lifespan and deferring replacement.
- **Net benefits accruing to customers**
 - Proactive replacement of end-of-life poles or reinforcement of poles benefits customers as they reduce the number of pole failures which can lead to significant public safety risks and prolonged service disruptions.
- **Impact of the investment on reliability performance including frequency and duration of outages**
 - Proactive replacements and reinforcements may reduce the frequency and duration of unplanned outages due to equipment failure.
- **Replacement Alternatives**
 - Scheduling alternatives: Pole replacements are scheduled for spring/summer/early fall to avoid extra costs incurred as a result of inclement weather, soil conditions and accessibility challenges during winter months. Design, surveys and material procurement are conducted in the winter and fall months.
 - Design alternatives: Replacements are on a like-for-like basis unless poles and hardware are not up to current standards, in which case BHI upgrades poles and hardware to current standards including standard pole heights.

Evaluation Criteria and Information

Investment Need

The primary driver for this investment is assets at end of service life.

Investment Justification

BHI has an ongoing annual process to assess, prioritize and replace deteriorated poles, which mitigates the reliability and safety risk associated with operating assets in very poor or poor condition. Poles with serious deterioration and in critical condition are replaced immediately while others with varying degrees of degradation and remaining strength are prioritized for proactive replacement or reinforcement based on condition and criticality (i.e., number of customers served).

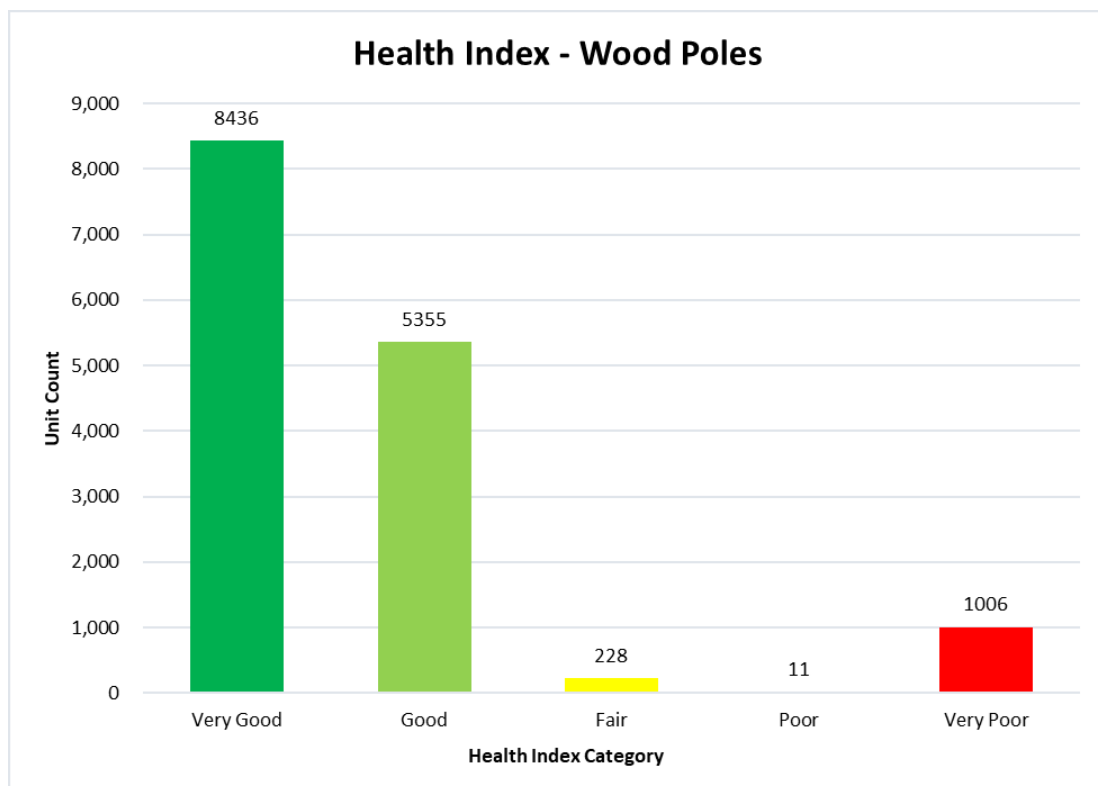
Asset Performance Target and Asset Lifecycle Optimization

This program supports the following performance measures:

- **System Reliability:** proactively replacing assets at the end of their service lives, and reinforcing assets, reduces the risk of an outage caused by asset failure.
- **Customer Satisfaction:** as the risk of asset failure decreases, the risk of outages decreases. Reliability is a top priority for BHI customers.
- **Safety:** BHI's performance against the Serious Electrical Incident Index may improve as there is less potential for a serious electrical incident when asset failure risk decreases.
- **Asset Performance:** improved asset condition facilitates better asset performance.

Asset Condition Relative to Typical Life Cycle

Wood poles are flagged for replacement based on the results of the ACA, which assesses the condition of BHI's poles based on remaining strength, wood rot, mechanical defects, out of plumb, and service age. Approximately 1,017 or 7% of BHI's wood poles are in very poor or poor condition, with another 228 or 2% poles in fair condition, which are expected to degrade toward poor or very poor condition over the DSP horizon.



Customer Impact and Risk

Typically, anywhere from one to eight customers may be directly impacted by a pole failure; however, the failure could impact more customers if the pole is part of the main pole line causing the main feeder breaker to open. Depending on where the pole fails on the system, restoring power via switching to other stations may not be possible, resulting in prolonged outage times.

Pole failures could result in decreased customer satisfaction due to the reliability impacts and the public safety risks they pose. Replacing poles before their end-of-life, will mitigate this risk.

Safety

Proactive replacement of poles in very poor and poor condition will reduce the risk of pole failures and possible downed wires. Downed primary wires creates a safety hazard for the public and employees.

Cyber-Security and Privacy

N/A

Environmental Benefits

Replacing poles in very poor and poor condition mitigates the risk of oil spills for failed poles holding oil-filled equipment.

Statutory/regulatory obligations

N/A

Other Information**Factors Relating to Customer Preferences or Input from Customers and Other Third Parties**

Through BHI's recent customer engagement process, more than 90% of customers across all rate classes said they support BHI's strategy for spending on proactive replacement of deteriorated infrastructure and upgrade of its distribution system.

Customers were also asked about the importance and appropriateness of planned System Renewal expenditures, including pole replacements to reduce the risk of outages due to cable failure. More than 93% of customers rated investment in System Renewal as important and more than 87% rated proposed spending levels as appropriate.

Consideration of Non-Wires Solutions

N/A



Program Name: Switchgear Replacement and Substation Automation

OEB Investment Category: System Renewal

General Information on Project

Overview This program manages the replacement of end-of-life station primary switchgear at BHI's Municipal Stations ("MSs"). Station primary switchgear consists of breakers, air break switches, and fuses that control and regulate the current flowing through the distribution system. During a fault, the primary switchgear isolates and clears the faults downstream. It is also used to de-energize equipment during maintenance and testing. BHI has three types of primary station switchgears: Metal-clad, Overhead, and Vista switchgears. BHI does not run these assets to failure as they are critical upstream assets, and the specialized nature of this equipment results in long lead times. Some of these assets are in very poor condition, obsolete, and functionally limited.

Scope and volume of work BHI plans to replace one to two primary station switchgear annually over the DSP period. This is approximately double the pacing of the historical period, driven by their deteriorated condition (45% or 20 units are in poor or very poor condition) which will avoid asset failures and the negative reliability and safety impacts they can cause.

Capital Investment	Program	2026	2027	2028	2029	2030
	Station Switchgear	\$408,000	\$364,000	\$371,350	\$378,700	\$386,400

Key Project Dates	Start Date:	Jan 1, 2026
	In-Service Date:	Dec 31, 2026
	Expenditure Timing:	Q1: \$204,000 Q2: \$204,000
	Factors affecting the timing	

Comparative historical information

Program	2021	2022	2023	2024	2025 F
Station Switchgear	\$292,930	\$100,102	\$2,048	\$158,826	\$350,000

The historical cost to install a new station primary Vista switchgear ranged from \$100K to \$350K depending on whether it was housed in a single or dual transformer station. BHI spent an average of \$180K per year over the historical period and is proposing to double the pace of these replacements over the forecast period due to the number of units in poor and very poor condition.

Investment Priority

This project was assessed using BHI's project prioritization process based on its impact on each asset management objective. The project was ranked as the 5th highest priority project out of 52. The ranking is driven by high safety and reliability impacts if the asset is not replaced and fails.

For more details, see Sections 5.3.1.3.3 and 5.4.2.1 of the DSP.

Analysis of Project and Project Alternatives

Alternatives for station primary switchgear replacements include: (i) proactive replacement, or (ii) reactive replacement (i.e., "run-to-failure" and replace on an

emergency basis). Proactively replacing these assets before they fail is the most prudent investment decision and in the best interest of BHI and its customers. Repairing station primary switchgear is costly and challenging due to the lack of available parts, as these units have become obsolete.

Replacement Alternatives

- Scheduling alternatives: Station Switchgear replacements are scheduled for spring and early fall due to system loading constraints during the summer peak load months and to avoid extra cost costs incurred as a result of inclement weather, soil conditions and accessibility challenges during winter months (for those switchgear not housed in buildings). Design, surveys and material procurement are conducted during the winter and fall months.
- Design alternatives: This program is considered an upgrade and part of BHI's distribution grid modernization efforts.

Evaluation Criteria and Information

Investment Need

The primary driver for this investment is assets at the end of their service life. BHI does not run these assets to failure as they are critical upstream assets, and lead times to procure replacements are lengthy due to the specialized nature of this equipment.

Investment Justification

The source of information used to justify this investment is monthly visual inspection data and regular preventive maintenance testing. BHI leverages inspection programs to accurately assess the condition of its in-service assets and inform its investment decisions. BHI also engaged a third-party consultant to develop a methodology for asset evaluation and assess data collected by BHI on its distribution system assets (Asset Condition Assessment ("ACA"))¹.

Asset Performance Target and Asset Lifecycle Optimization

This program supports the following performance measures:

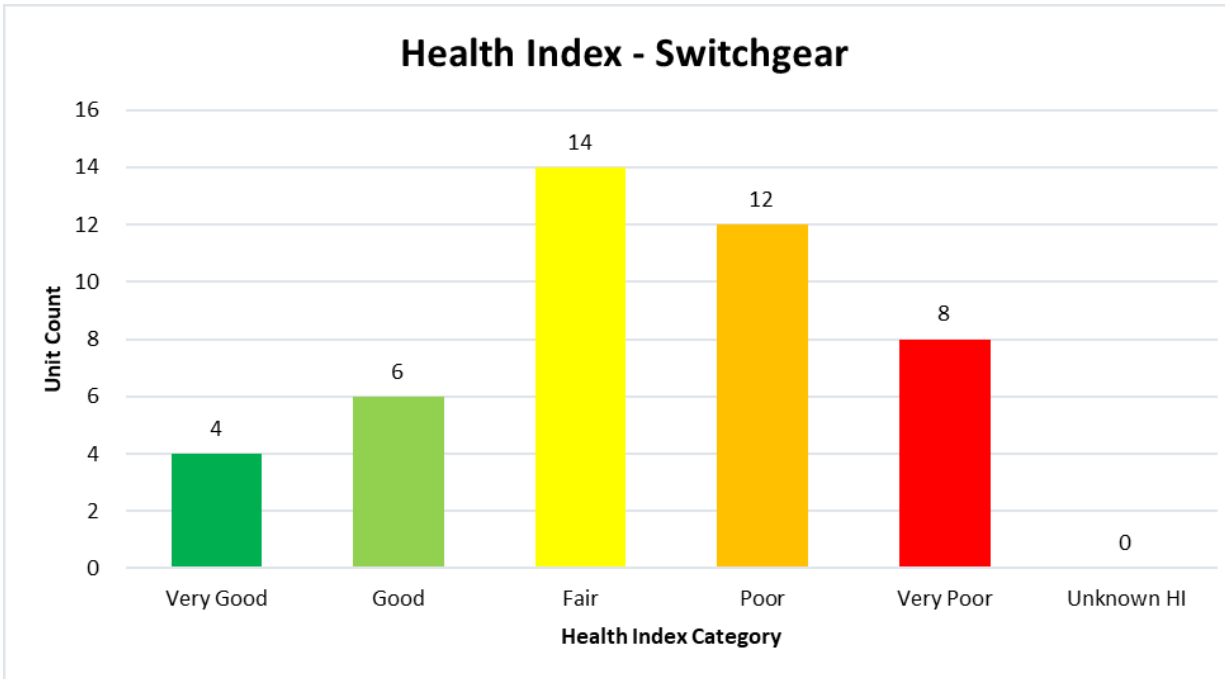
- System Reliability: proactively replacing assets approaching the end of their service lives reduces the risk of an unplanned outage caused by asset failure.
- Customer Satisfaction: as the risk of asset failure decreases, the risk of outages decreases. Reliability is a top priority for BHI customers.
- Safety: BHI's performance against the Serious Electrical Incident Index may improve as live-front units in very poor condition are replaced, reducing the probability of failure during operation, and mitigating the associated safety concerns.
- Asset Performance: improved asset condition will facilitate better asset performance.

All MS assets are inspected as part of a monthly visual inspection, which includes minor repairs of deficiencies if found.

Asset Condition Relative to Typical Life Cycle

Station primary switchgear is recommended for replacement based on monthly visual inspections, regular preventive maintenance testing, and service age. Some of BHI's station primary switchgear are in very poor condition based on the results of the ACA, which is driving the need for this program.

¹ DSP Appendix I



Customer Impact and Risk

The Station primary switchgear can service up to 4,000 customers, who could be interrupted for an extended period if a failure occurred. A failure could also have safety impacts on BHI employees.

A failure could result in decreased customer satisfaction due to the extended outage duration and the negative public perception of the safety risks it poses.

Like-for-Like Renewal Analysis

BHI does not replace these assets on a like-for-like basis due to technological and functional obsolescence. New station primary switchgear meet the latest distribution system standards and have the same technical requirements as existing units. New units are remote operable and capable of communicating with BHI's SCADA system, which can reduce the scope and duration of outages and crew travel time in the event of failure.

Safety

A station primary switchgear failure during operation poses a serious safety risk to BHI employees due to the exposure to live parts and potential for arc flashing. New station primary switchgear units are not live-front and can be operated remotely, eliminating this safety risk. Proactively replacing switchgears will reduce the number of live-front units in poor and very poor condition, reducing the probability of failure during operation, and mitigating the associated safety risks.

Cyber-Security and Privacy

Station primary switchgears are part of BHI's SCADA system and communication network. Security measures are considered in the software and hardware components of the devices, and the communication network utilized for new primary station switchgear.

Benefits of innovative nature of project

Newer units are remote operable which allows the control room operators to have real time situation awareness on performance, and the capability to remotely poll and operate these devices to pre-empt potential long-term outages due to unplanned failures.

Other Information**Factors Relating to Customer Preferences or Input from Customers and Other Third Parties**

Through BHI's recent customer engagement process, more than 90% of customers across all rate classes said they support BHI's strategy of investing in proactively replacing deteriorated infrastructure as needed, based on its condition and likelihood to fail.

Customers were also asked about the importance and appropriateness of planned System Renewal expenditures. More than 93% of customers rated investment in System Renewal as important and more than 87% rated proposed spending levels as appropriate.

Consideration of Non-Wires Solutions

N/A

**Program Name:** Station Relays Replacement**OEB Investment Category:** System Renewal**General Information on Project**

Overview	<p>This program manages the replacement of end-of-life station feeder protection relays at BHI's Municipal Stations ("MSs"). Feeder protection relays are an asset used in substation operations to trip a circuit breaker when a fault is detected. By the end of 2024, 85% of BHI's 127 station protection relays were technically obsolete electromechanical and old electronic relays, which do not permit event reporting, fault diagnostics, or power flow observability.</p> <p>To advance BHI's grid modernization efforts, end-of-life relays will be replaced with new SCADA-compliant units. This enhances BHI's ability to detect and isolate interruptions, improving operational efficiency and ensuring the safety, and reliability of the distribution system. These capabilities allow for real-time monitoring, fault detection, and remote control, reducing the need for manual intervention and minimizing the duration of outages.</p>
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Scope and volume of work	BHI plans to replace 8 station relays annually, totaling 40 over the next rate period. This is approximately double the pacing of the historical period, driven by failure risk (56% or 71 units are in poor or very poor condition) and technical obsolescence (85% or 108 units are obsolete).
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Capital Investment	Program	2026	2027	2028	2029	2030
	Substation Relays	\$408,000	\$416,000	\$424,400	\$432,800	\$441,600

Key Project Dates	Start Date:	Jan 1, 2026
	In-Service Date:	Dec 31, 2026
	Expenditure Timing:	Q1: \$100,000 Q2: \$100,000 Q3: \$100,000 Q4: \$108,000
	Factors affecting the timing	Material lead time

Comparative historical information

Program	2021	2022	2023	2024	2025 F
Substation Relays	\$115,375	\$224,303	\$236,469	\$471,346	\$220,000

On average over 2021-2025, BHI expects to spend \$254K per year on this program and is planning to increase the pace of replacement due to deteriorating asset condition and obsolescence of these units.

Investment Priority

This project was assessed using BHI's project prioritization process based on its impact on each asset management objective. The project was ranked as the 6th highest priority project.. The ranking is driven by high safety and reliability impacts if the asset is not replaced and fails.

For more details, see Sections 5.3.1.3.3 and 5.4.2.1 of the DSP.

Analysis of Project and Project Alternatives

BHI has considered, among others, the following aspects as part of its alternatives analysis:

- **Effect of the investment on system operation efficiency and cost-effectiveness**
 - This program enables BHI to proactively plan and manage the replacement of deteriorated and obsolete station feeder relays to avoid asset failures and the negative reliability and safety impacts they can cause.
 - Proactive replacement of end-of-life station feeder protection relays is operationally more efficient as it can be planned to minimize overtime (premium) hours and is less disruptive to other ongoing projects. Sourcing replacement units quickly to facilitate reactive replacements can be challenging due to supply chain issues, impacting operational performance.
- **Net benefits accruing to customers**
 - Proactive vs. reactive replacement of end-of-life station feeder protection relays benefit customers as it reduces the risk and duration of unplanned outages due to asset failure since they are coordinated to avoid customer interruptions. Station feeder protection relays service up to 1,000 customers, all of whom could be out of service for an extended period if a failure occurs.
 - Proactive replacement mitigates safety concerns if a failure occurs. New relays offer arc-flash mitigation, fault location, high-impedance fault detection, broken conductor detection, event analysis, remote operability and are capable of communicating with BHI's SCADA system, which can reduce the scope and duration of outages.
- **Replacement Alternatives**
 - Alternatives for feeder protection relays replacements include: (i) proactive replacement, or (ii) reactive replacement (i.e., run-to-failure and replace on an emergency basis). Proactively replacing these assets before they fail is the most prudent investment decision and in the best interest of BHI and its customers. Repairing station feeder relays is challenging due to the lack of available parts, as these units have become obsolete.

Evaluation Criteria and Information

Investment Need

The primary driver for this investment is assets at the end of their service life and obsolescence. BHI does not run these assets to failure as they are critical upstream assets, and the specialized nature of this equipment results in long lead times.

Investment Justification

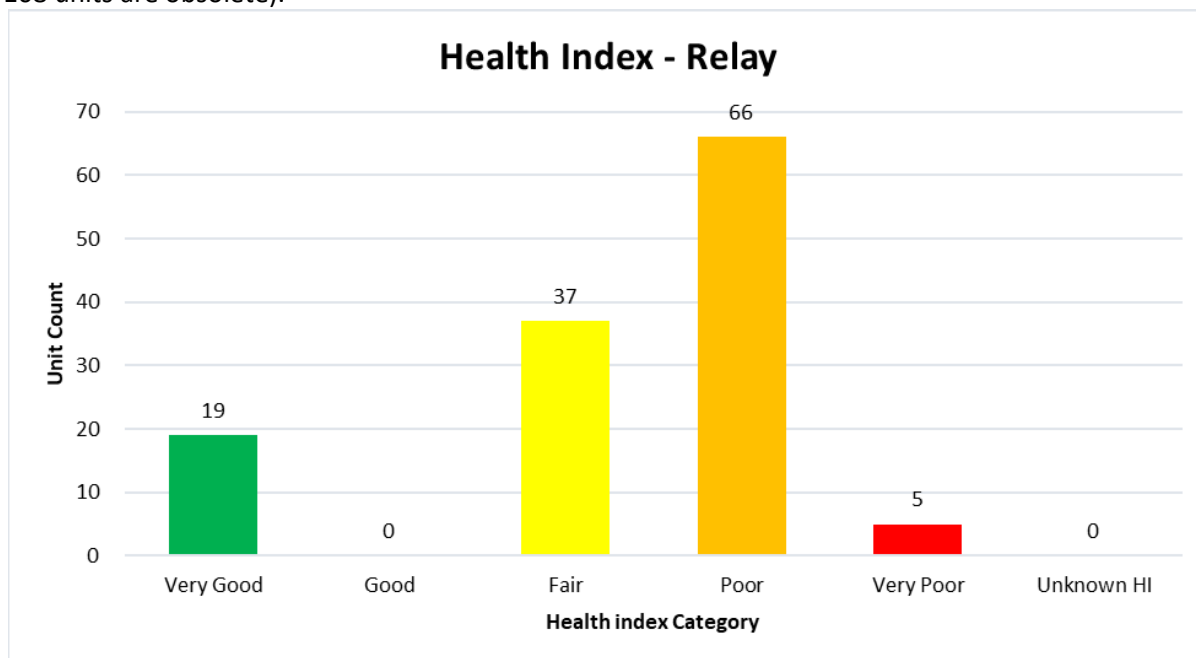
The source of information used to justify this investment is technical and functional obsolescence, monthly visual inspection data, and regular preventive maintenance testing. BHI leverages inspection programs to accurately assess the condition of its in-service assets and prioritize its investment decisions. BHI also engaged a third-party consultant to perform an (Asset Condition Assessment ("ACA"))¹ which also informs asset replacement decisions.

¹ DSP Appendix I

Relays are inspected as part of a monthly visual inspection, which includes minor repairs of any deficiencies found.

Asset Condition Relative to Typical Life Cycle

Relays are recommended for replacement based on monthly visual inspection, regular preventive maintenance testing and inspection, and service age. The proposed pacing of this program is driven by failure risk (56% or 71 units are in poor or very poor condition) and technical obsolescence (85% or 108 units are obsolete).



Customer Impact and Risk

Station feeder relay can service up to 1,000 customers, who could be interrupted for an extended period if a failure occurred. A failure could also have safety impacts on BHI employees.

A failure could result in decreased customer satisfaction due to the extended outage duration and the negative public perception of the safety risks it poses.

Like-for-Like Renewal Analysis

BHI is unable to replace end of life relays on a like-for-like basis due to technological obsolescence. New relays meet current industry standards and are typically intelligent electronic devices with programmable features and capable of communicating with BHI's SCADA system.

Safety

Failure of station feeder protection relays poses a serious safety risk to BHI employees and the public if the relays don't perform as expected during an event, which impacts downstream distribution assets. New station feeder protection relays can communicate with downstream protective devices and be part of a self-healing schema. They offer additional features that contribute to the safe operation of the distribution system as identified above.

Cyber-Security and Privacy

Station feeder protection relays are part of BHI's SCADA system and communication network. Security measures are considered in the software and hardware components of the devices, and communication network utilized for new feeder protection relays.

Other Information**Factors Relating to Customer Preferences or Input from Customers and Other Third Parties**

Customers were also asked about the importance and appropriateness of planned System Renewal expenditures. More than 93% of customers rated investment in System Renewal as important and more than 87% rated proposed spending levels as appropriate.

Consideration of Non-Wires Solutions

N/A

**Program Name:** Station Transformer Replacement**OEB Investment Category:** System Renewal**General Information on Project**

Overview This program manages the replacement of end-of-life station power transformers at BHI's Municipal Stations ("MSs"). Station power transformers are used to step down the voltage within the distribution system to supply end users. BHI utilizes data from monthly visual inspections, oil sample testing and loading information to assess the risk of failure and prioritize station transformers for replacement. BHI does not run these assets to failure as they are critical upstream assets; can cause catastrophic safety and environmental impacts if they fail; require up to two years of planning lead time to replace; and each replacement must be paced to maintain system loading/balancing and backup capability.

Scope and volume of work BHI is proposing to maintain the pacing of its station transformer replacements to avoid a backlog of assets requiring replacement. BHI has 44 station transformers and must pace replacements over a longer time horizon to avoid multiple transformers being out of service at the same time which would cause significant reliability issues for customers and system loading/balancing and backup capability challenges for BHI.

BHI is actively monitoring four station transformers for which dissolved gas analysis ("DGA") results have indicated elevated levels of certain gases and/or probable active gassing. BHI relies on the DGA test results as a leading indicator of the internal state/health of the transformer. Based on ongoing monitoring and test results, BHI will determine which transformers must be prioritized for replacements.

Capital Investment	Program	2026	2027	2028	2029	2030
	Station Transformer Replacement	\$408,000	\$416,000	\$424,400	\$432,800	\$441,600

Key Project Dates	Start Date:	Jan 1, 2025
	In-Service Date:	Dec 31, 2026
	Expenditure Timing:	Q3: \$408,000
	Factors affecting the timing	Material lead time

Comparative historical information

Program	2021	2022	2023	2024	2025 Fcst
Station Transformer Replacement	\$319,004	\$1,011,123	\$204,940	\$490,012	\$450,000

BHI's historical expenditures over the 2021-2025 period averaged \$500K per year. BHI is proposing to maintain the pacing of its station transformer replacements.

Investment Priority

This project was assessed using BHI's project prioritization tool based on its impact on each asset management objective. The project was ranked as the 7th highest out of 52 in priority. The ranking is driven by high safety, reliability, and environmental impacts if the asset is not replaced when required and fails.

For more details, see Sections 5.3.1.3.3 and 5.4.2.1 of the DSP.

Analysis of Project and Project Alternatives

Alternatives for power station transformer replacements include: (i) proactive replacement, or (ii) reactive replacement (i.e., run-to-failure and replace on an emergency basis). Proactively replacing these assets before they fail is the most prudent investment decision and in the best interest of BHI and its customers. BHI has considered, among others, the following aspects as part of its alternatives analysis:

- **Effect of the investment on system operation efficiency and cost-effectiveness**
 - Proactive replacement of end-of-life transformers is more efficient as they can be planned to minimize overtime (premium) hours and are less disruptive to other ongoing projects. Also, reactive replacements generally follow as a result of failure of the equipment which may also adversely affect other connected equipment and cause them to fail, thereby increasing the scope and cost of the overall project.
- **Impact of the investment on reliability performance including frequency and duration of outages**
 - Proactive replacements reduce the risk of unplanned outages due to asset failure since they are coordinated to minimize customer interruptions.
 - Station transformers service approximately 4,000 customers on average, all of whom could be out of service for an extended period if a failure occurs.
 - A single transformer supplies electricity through multiple primary feeders coming out of an MS which may not have redundancy through load transfers with other MS feeders. This consequently restricts BHI's capability to restore power to affected customers when station transformers fail.
- **Replacement Alternatives**
 - Scheduling alternatives: Station Transformer replacements are scheduled for spring and early fall due to system loading constraints during the summer peak load months and to avoid extra costs incurred as a result of inclement weather, soil conditions and accessibility challenges during winter months (for those transformers not housed in buildings). Design, surveys and material procurement are conducted during the winter and fall months.
 - Design alternatives: BHI used to replace transformers on a like-for-like basis unless transformers were not up to current CSA standards in which case the transformers were upgraded. Recently, BHI started replacing end of life oil-type station transformers with dry-type station transformers (where applicable), which have different characteristics but meet the same technical requirements. The rationale for this renewal option is provided below.

Evaluation Criteria and Information

Investment Need

The primary driver for this investment is assets at end of service life. BHI currently replaces one transformer in two years and only does so after all remedial and rehabilitation options have been exhausted. BHI does not run these assets to failure as they are critical upstream assets; can cause catastrophic safety and environmental impacts if they fail; require up to two years of planning lead time to replace; and must be paced to maintain system loading/balancing and backup capability.

Investment Justification

The source of information used to justify this investment is monthly visual inspection, annual (or as required) oil sample testing, preventive maintenance electrical testing and loading information. BHI leverages inspection programs to accurately assess the condition of its in-service assets and prioritize its investment decisions. BHI also engaged a third-party consultant to develop a methodology for asset evaluation and assess data collected by BHI on its distribution system assets (Asset Condition Assessment (“ACA”))¹.

Asset Performance Target and Asset Lifecycle Optimization

This program supports the following performance measures:

- System Reliability: proactively replacing assets at the end of their service lives reduces the risk of an outage caused by asset failure.
- Customer Satisfaction: as the risk of asset failure decreases, the risk of outages decreases. Reliability is a top priority for BHI customers.
- Safety: BHI’s performance against the Serious Electrical Incident Index may improve as there is less potential for a catastrophic event when asset failure risk decreases.
- Asset Performance: improved asset condition will facilitate better asset performance.

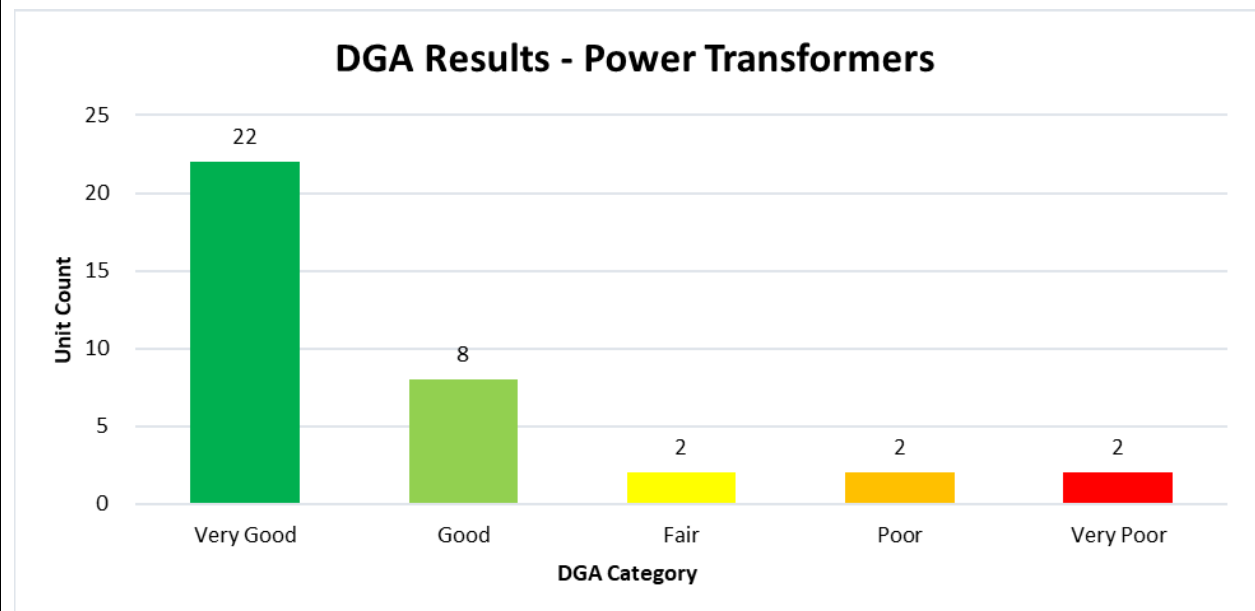
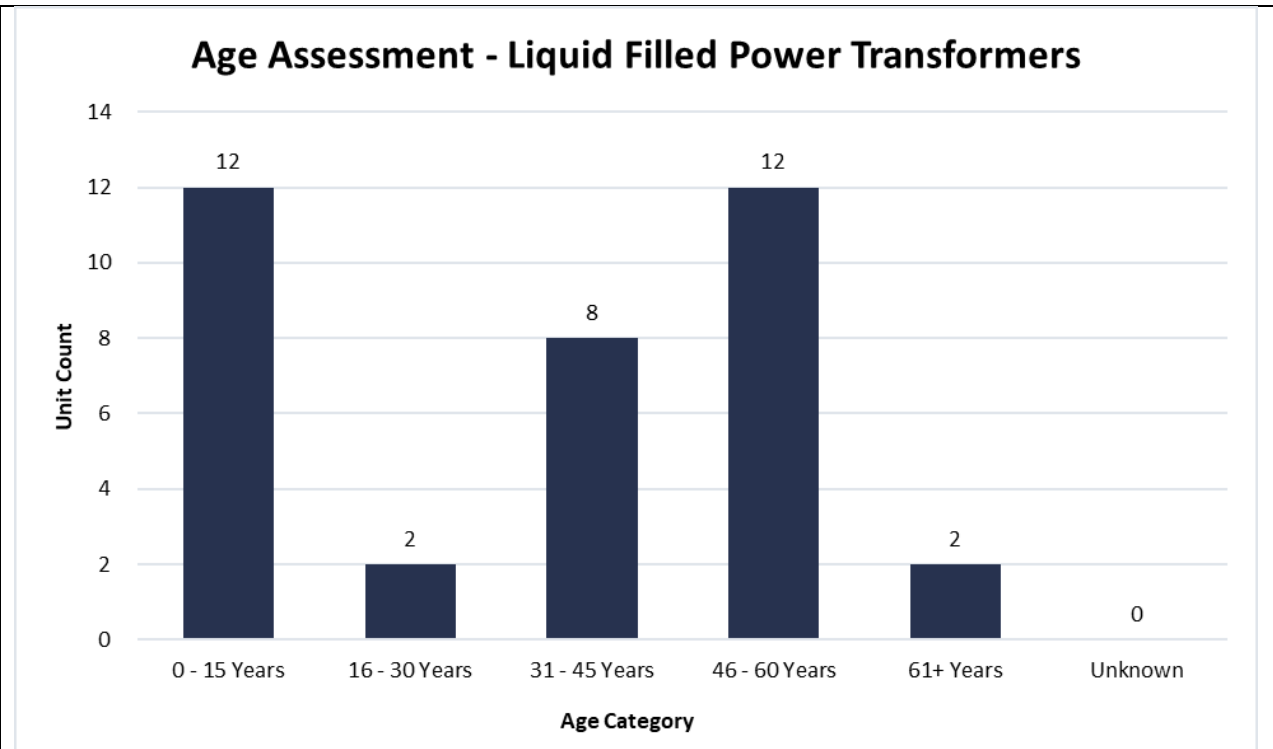
All MS assets are inspected as part of a monthly visual inspection, which includes a thorough inspection, and minor repairs of deficiencies found. Oil testing is conducted for oil type station transformers based on samples obtained annually, monthly or quarterly, depending on the criticality of the transformer and the DGA (dissolved gas analysis) results of the previous oil test. Oil testing is an important part of the condition assessment process for oil type station transformers.

Asset Condition Relative to Typical Life Cycle

BHI monitors the condition of its station transformers on a regular basis using data from monthly visual inspections, oil sample testing, electrical testing and historical transformer loading, which aids in predicting remaining life and prioritizing the most critical transformers for replacement.

While the results of the ACA do not identify any station transformers in very poor or poor condition, BHI has identified transformers that need to be replaced over the DSP horizon due to elevated levels of certain gases and/or probable active gassing, and widespread deterioration of specific components such as paper insulation, windings, tap changers, etc. These assets are more than 45 years old, and their condition can deteriorate more rapidly than newer transformers.

¹ DSP Appendix I



Customer Impact and Risk

As stated above, station transformers service up to 4,000 customers, who could be interrupted for an extended period if a failure occurred, as load would have to be transferred to another station. A catastrophic failure could also have negative safety impacts on the public.

A catastrophic failure could result in decreased customer satisfaction due to the extended outage duration and the negative public perception of the safety and environmental risks it poses.

Renewal Strategy

Where feasible, BHI has started replacing end of life oil-type station transformers with dry-type station transformers (where applicable), which meet the same technical requirements. This reduces the risk of potential oil leaks and contamination and eliminates the need for oil containment at the stations. All new transformers are equipped with network connected monitoring control devices that can provide the status of the cooling system and measure transformer winding and ambient temperatures, which is remotely available to BHI's control room. The network connected monitoring control device is part of the transformer safety system that is designed to prevent catastrophic failure.

Efficiency

Proactive replacement of station transformers reduces the probability of these assets failing, which avoids the associated costs from outages response and/or damaged equipment.

Safety

Catastrophic failure of these transformers poses a safety risk to the public and property as well as BHI employees due to potential fire and/or explosion.

Cyber-Security and Privacy

N/A

Environmental Benefits

Catastrophic failure of oil-type transformers can result in high environmental impacts and costs due to the spill of mineral oil. BHI's practice has been to replace, where feasible, oil-type transformers with dry-type transformers, which in turn reduces the risk of a potential oil leak and contamination.

Other Information**Factors Relating to Customer Preferences or Input from Customers and Other Third Parties**

Through BHI's recent customer engagement process, more than 90% of customers across all rate classes said they support BHI's strategy for spending on proactive replacement of deteriorated infrastructure, upgrade the distribution system to respond to increasing extreme weather, and invest in new and innovative technology.

Customers were also asked about the importance and appropriateness of planned System Renewal expenditures, including replacement/rehabilitation of station power transformers to reduce the risk of outages. More than 93% of customers rated investment in System Renewal as important and more than 87% rated proposed spending levels as appropriate.

Consideration of Non-Wires Solutions

N/A

**Program Name:** Substation Circuit Breakers Replacement**OEB Investment Category:** System Renewal**General Information on Project**

Overview	<p>This program manages the replacement of end-of-life station circuit breakers at BHI's Municipal Stations ("MSs"). BHI owns 132 circuit breakers within its service territory, of which 48 air magnetic circuit breakers are beyond their 45-year useful life expectancy. Circuit breakers are critical substation assets and are the primary feeder isolation devices for maintaining public safety and protecting other distribution equipment. During a fault, the circuit breaker isolates and clears the faults downstream. It is also used to de-energize equipment during maintenance and testing. BHI does not run these assets to failure as they are critical upstream assets, and the specialized nature of this equipment results in long lead times. 36% of these assets are obsolete, functionally limited and no longer supported by manufacturers.</p> <p>Obsolescence includes technical obsolescence, where the breaker lacks spare parts or manufacturer support, and functional obsolescence, where the breaker lacks modern capabilities. This program helps BHI to proactively plan and manage the replacement of deteriorated and/or obsolete station circuit breakers to avoid asset failures and the negative reliability and safety impacts they can cause. New units are vacuum circuit breakers and are remotely operable and capable of communicating with BHI's Supervisory Control and Data Acquisition ("SCADA") system, which helps reduce the scope and duration of outages.</p>
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Scope and volume of work	BHI plans to replace four circuit breakers each year for the 2026-2030 period. This is approximately double the pacing of the historical period, driven by the number of obsolete units, the criticality of these units, and the lead time in obtaining this specialized equipment.
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Capital Investment	Program	2026	2027	2028	2029	2030
	Substation Circuit Breakers	\$255,000	\$260,000	\$265,250	\$270,500	\$276,000

Key Project Dates	<table><tr><td>Start Date:</td><td>Jan 1, 2026</td></tr><tr><td>In-Service Date:</td><td>Dec 31, 2026</td></tr><tr><td>Expenditure Timing:</td><td>Q1: \$125,000, Q2: \$130,000</td></tr><tr><td>Factors affecting the timing</td><td>Material lead time</td></tr></table>	Start Date:	Jan 1, 2026	In-Service Date:	Dec 31, 2026	Expenditure Timing:	Q1: \$125,000, Q2: \$130,000	Factors affecting the timing	Material lead time
Start Date:	Jan 1, 2026								
In-Service Date:	Dec 31, 2026								
Expenditure Timing:	Q1: \$125,000, Q2: \$130,000								
Factors affecting the timing	Material lead time								

Comparative historical information

Program	2021	2022	2023	2024	2025 Fcst
Substation Circuit Breakers	\$117,923	\$158,046	\$113,299	\$93,742	\$200,000

BHI replaced 14 circuit breakers over the 2021-25 period, spending \$136K per year on average. BHI plans to replace four circuit breakers annually over the DSP period, as identified above.

Investment Priority

This project was assessed using BHI's project prioritization process based on its impact on each asset

management objective. The project was ranked as the 8th out of 52nd in project priority. The ranking is driven by high safety and reliability impacts if the asset is not replaced and fails.

For more details, see Sections 5.3.1.3.3 and 5.4.2.1 of the DSP.

Analysis of Project and Project Alternatives

BHI has considered, among others, the following aspects as part of its alternatives analysis:

Effect of the investment on system operation efficiency and cost-effectiveness

- Proactive replacement of end-of-life station circuit breakers is more cost effective as it can be planned to minimize overtime (premium) hours and is less disruptive to other ongoing projects.
- Proactive replacement mitigates safety issues if a failure occurs. Newer units are vacuum breakers, remote operable, faster, and capable of communicating with BHI's SCADA system, which can reduce the scope and duration of outages.

Replacement Alternatives

- Alternatives for station circuit breaker replacements include: (i) proactive replacement, or (ii) reactive replacement (i.e., run-to-failure and replace on an emergency basis). Proactively replacing these assets before they fail is the most prudent investment decision and in the best interest of BHI and its customers. Repairing station circuit breakers is costly and challenging due to the lack of available parts, as these units have become obsolete.

Evaluation Criteria and Information

Investment Need

The primary drivers for this investment are i) assets at the end of their service life, and ii) obsolescence. BHI does not run these assets to failure as they are critical upstream assets, and the specialized nature of this equipment results in long lead times.

Investment Justification

The source of information used to justify this investment is technical obsolescence in addition to monthly visual inspection and regular preventive maintenance testing and inspection data. BHI leverages inspection programs to accurately assess the condition of its in-service assets and prioritize its investment decisions.

Asset Performance Target and Asset Lifecycle Optimization

This program supports the following performance measures:

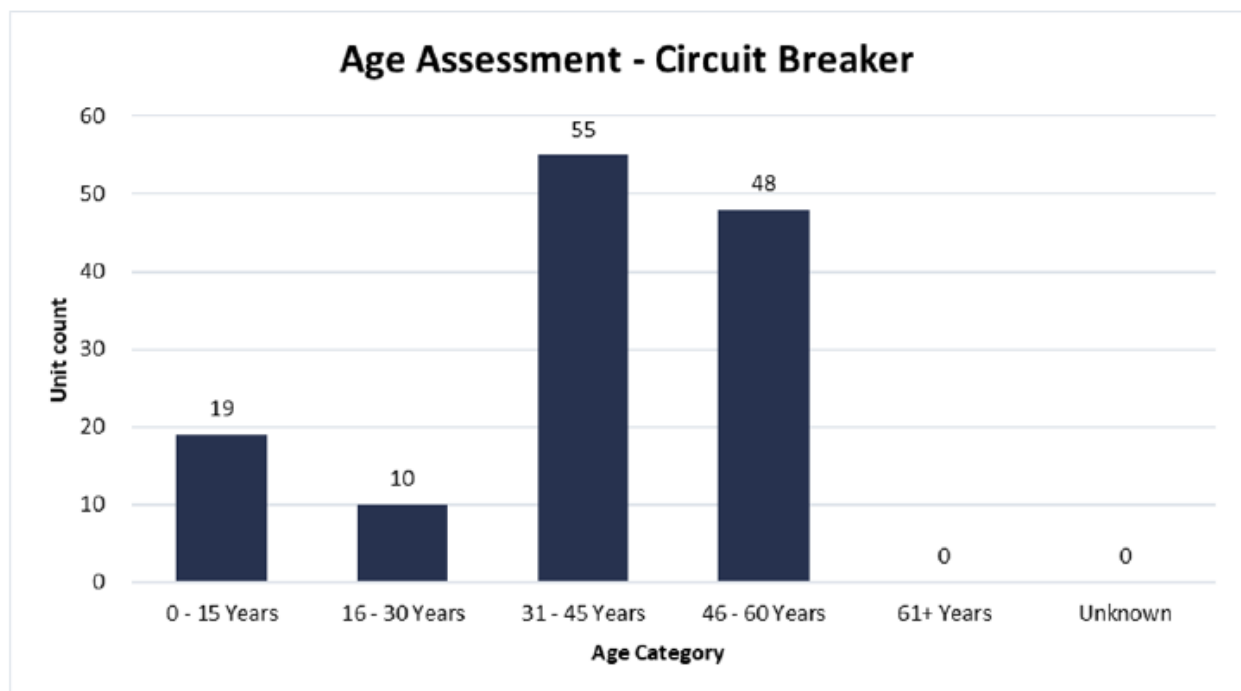
- System Reliability: proactively replacing assets approaching the end of their service lives reduces the risk of an unplanned outage caused by asset failure.
- Customer Satisfaction: as the risk of asset failure decreases, the risk of outages decreases. Reliability is a top priority for BHI customers.
- Cost Metrics: given that reactive failures are more costly than proactive replacements, this program represents the most cost-effective replacement strategy.
- Safety: BHI's performance against the Serious Electrical Incident Index may improve as obsolete air magnetic breakers are replaced, reducing the probability of failure during operation, and mitigating associated safety issues.

- Asset Performance: improved asset condition will facilitate better asset performance.

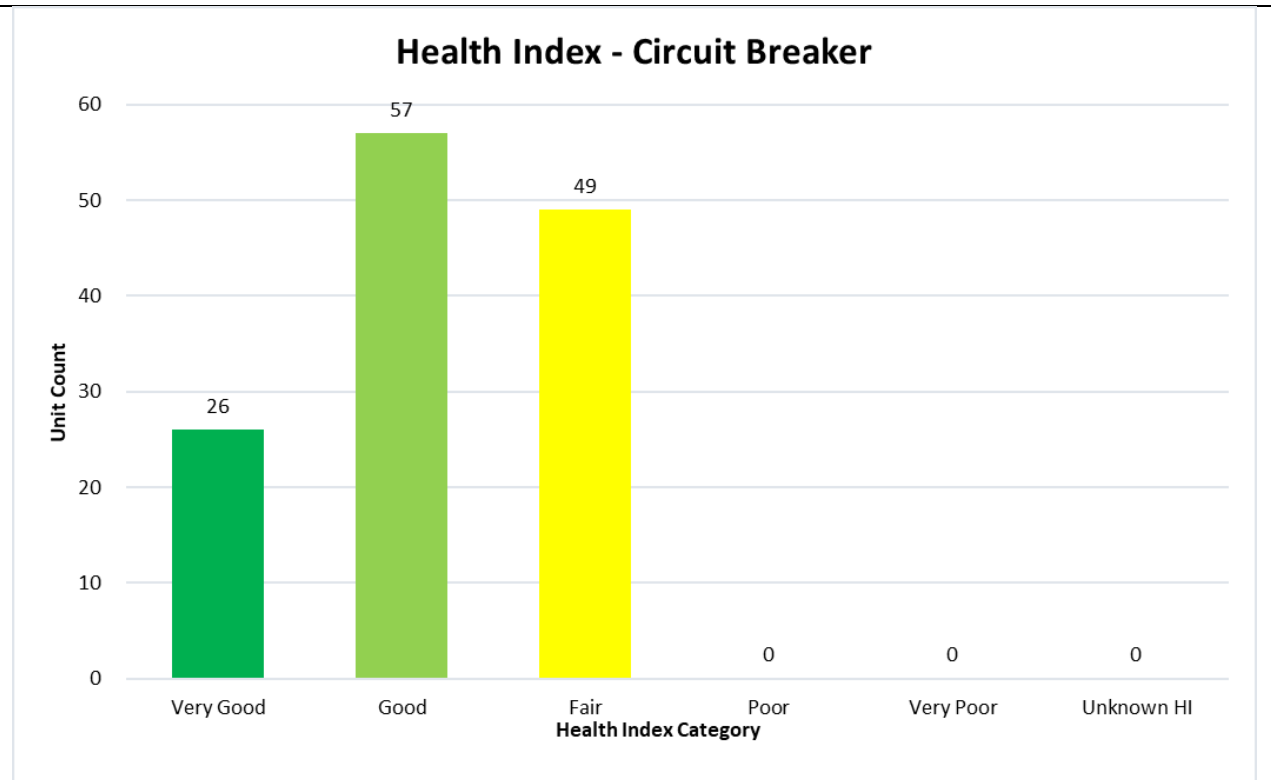
All MS assets, including circuit breakers, are inspected as part of a monthly visual inspection, which includes a thorough inspection, and minor repairs of deficiencies found.

Asset Condition Relative to Typical Life Cycle

Station circuit breakers are recommended for replacement based on monthly visual inspection, regular preventive maintenance testing and inspection, and service age. As shown below, 48 of BHI's station circuit breakers are more than 46 years old, obsolete, and not suitable for operability with SCADA (and the future ADMS), which is driving the need for this program. Individual units are prioritized for replacement based on the latest ACA¹ information collected during the budget year. BHI is proposing to replace four units per year starting in 2026 to decrease the percentage of circuit breakers that are obsolete.



¹ DSP Appendix I



Quantitative Customer Impact and Risk

Station circuit breakers can service up to 1,000 customers, who could be interrupted for an extended period if a failure occurs. A failure could also have negative safety implications for BHI employees.

Qualitative Customer Impact and Risk

A failure could result in decreased customer satisfaction due to the extended outage duration and the negative public perception of the safety risks it poses.

Value of Customer Impact

The value of customer impact is high given the criticality of these assets to the reliability of the system, the number of customers impacted, and safety risks.

Like-for-Like Renewal Analysis

The new vacuum circuit breakers meet the latest distribution system standards and have the same technical requirements as existing units. New units are faster, remote operable and capable of communicating with BHI's SCADA system, which will help reduce the scope and duration of outages and crew travel time.

Efficiency

Proactive replacements of end-of-life-station circuit breakers are more cost effective as they can be planned in an efficient manner to minimize overtime (premium) hours and are less disruptive to other ongoing projects.

Cyber Security and Privacy

Station circuit breakers are part of BHI's SCADA system and communication network. Security measures are considered in both the software and hardware components of the devices and communication network utilized for new station equipment.

Benefits of innovative nature of project

Newer units are remote operable and capable of communicating with BHI's existing SCADA system, which will help reduce the scope and duration of outages and crew travel time. This feature allows the control room operators to have real time situation awareness on performance and they can remotely poll and operate these devices to pre-empt potential long-term outages due to unplanned failures.

Other Information**Factors Relating to Customer Preferences or Input from Customers and Other Third Parties**

Through BHI's recent customer engagement process, more than 90% of customers across all rate classes said they support the proposed or accelerated substation circuit breakers replacement strategy.

Customers were also asked about the importance and appropriateness of planned System Renewal expenditures. More than 93% of customers rated investment in System Renewal as important and more than 87% rated proposed spending levels as appropriate.

Consideration of Non-Wires Solutions

N/A

**Program Name:** Transformer Replacement**OEB Investment Category:** System Renewal**General Information on Project****Overview**

This program manages the replacement of distribution transformers (pole mounted, pad mounted, vault type and submersible) which supply residential, condominium, commercial, and industrial services. The primary function of these transformers is to step down power from the medium voltage distribution system to the final voltage rating for customer use.

Scope and volume of work

Distribution transformers are replaced whenever they become inoperable, leak oil, pose a safety risk or are no longer adequate to accommodate new load in the area. BHI is obligated under the DSC to replace these transformers to accommodate customer connections within its service territory.

Due to operational, safety and reliability reasons, all existing submersible transformers are being phased out of the system at the end of their useful life and replaced with above ground pad-mount transformers.

Capital Investment

Program	2026	2027	2028	2029	2030
Transformer Replacement	\$473,841	\$483,132	\$492,888	\$502,643	\$512,863

Key Project Dates

Start Date:	Jan 1, 2026
In-Service Date:	Dec 31, 2026
Expenditure Timing:	Q1: \$118K Q2: \$118K Q3: \$118K Q4: \$118K
Factors affecting the timing	Material lead time, timing of replacement decision

Comparative historical information

Program	2021	2022	2023	2024	2025 Fcst
Transformer Replacement	\$621,879	\$336,158	\$613,611	\$1,007,389	\$464,550

Very few of BHI's distribution transformers are in poor or very poor condition based on the results of the ACA¹, which is consistent with BHI's last ACA (from 2020). However, distribution transformers can deteriorate from fair to poor condition quickly. BHI experienced a number of failures over the historical period and replaced 35-45 distribution transformers per year as they became inoperable, leaked oil, posed a safety risk or were no longer adequate to accommodate load in the area.

Investment Priority

This program was assessed using BHI's project prioritization tool based on its impact on each asset management objective. The project was ranked as the 9th highest priority project out of 52 projects.

For more details, see Sections 5.3.1.3.3 and 5.4.2.1 of the DSP.

¹ DSP Appendix I

Analysis of Project and Project Alternatives

BHI's transformer replacement practices include a combination of proactive and reactive asset replacement. Several factors inform the decision to replace a transformer, including asset condition, risk of failure, impact of failure (safety, reliability, environmental), number of customers or load impacted, asset performance, obsolescence, and industry standards. Proactive replacement is utilized where transformers have deteriorated to the point where the risk of failure is high, and the impact of that failure poses a significant safety, reliability or other risk to BHI, its customers, and or the public. Reactive replacement is utilized where transformers can fail safely posing little to no impact to customers.

- **Effect of the investment on system operation efficiency and cost-effectiveness**
 - Replacing end-of-life transformers may reduce future maintenance and repair costs. Common issues found during inspections include oil leaks and surface rusting requiring repainting.
- **Net benefits accruing to customers**
 - Replacing end-of-life distribution transformers benefits customers through new distribution transformers that are reliable and built to current standards.
- **Impact of the investment on reliability performance including frequency and duration of outages**
 - Reliability performance is expected to be the same or better than BHI's average reliability performance since the probability of asset failure is lower with new equipment meeting current standards.
- **Replacement Alternatives**
 - Design alternatives: Design alternatives are limited as servicing options are standardized through BHI policies and practices, in line with its Conditions of Service. Transformer replacements/installations are designed based on current equipment approvals and installation standards.

Evaluation Criteria and Information

Investment Need

The primary drivers for this investment are assets at end of service life or asset failure. Distribution transformers are replaced whenever they become inoperable, leak oil, pose a safety risk or are no longer adequate to accommodate new load in the area.

Investment Justification

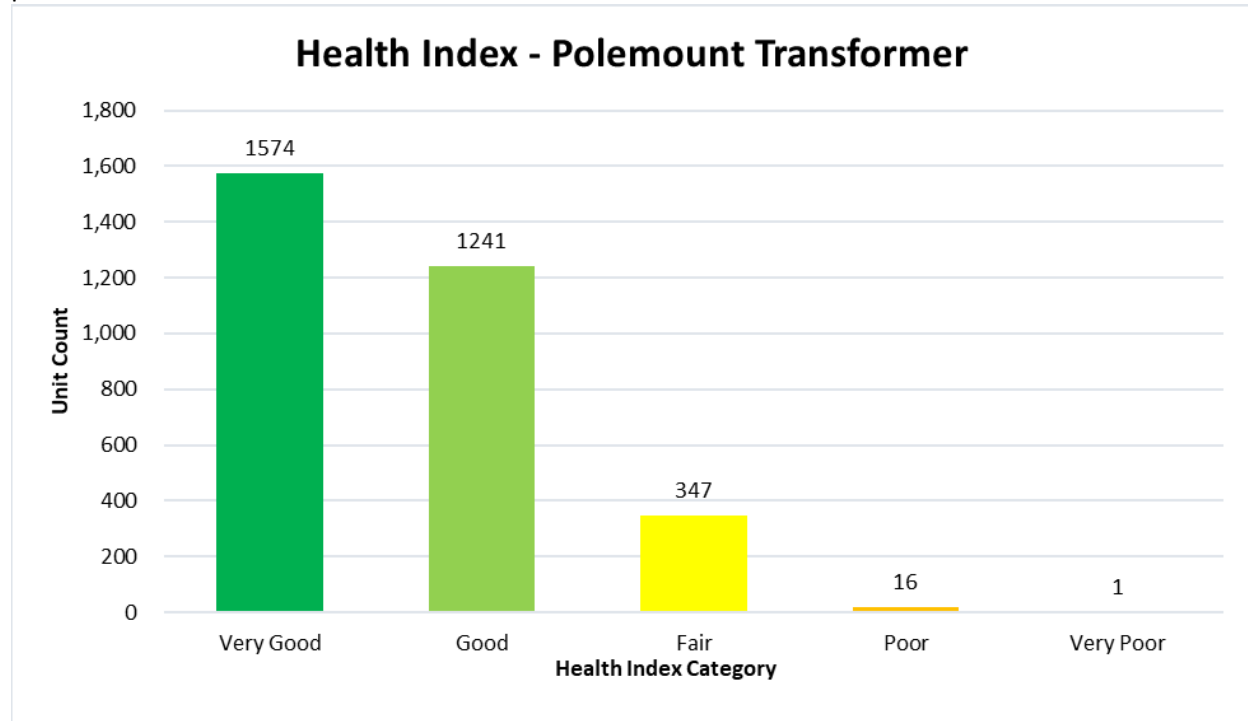
This program was assessed using BHI's project prioritization tool taking into consideration its impact on customers and asset management objectives). The project was ranked as the 9th highest priority project out of 52 projects.

BHI inspects distribution transformers in accordance with the inspection requirements of the DSC.

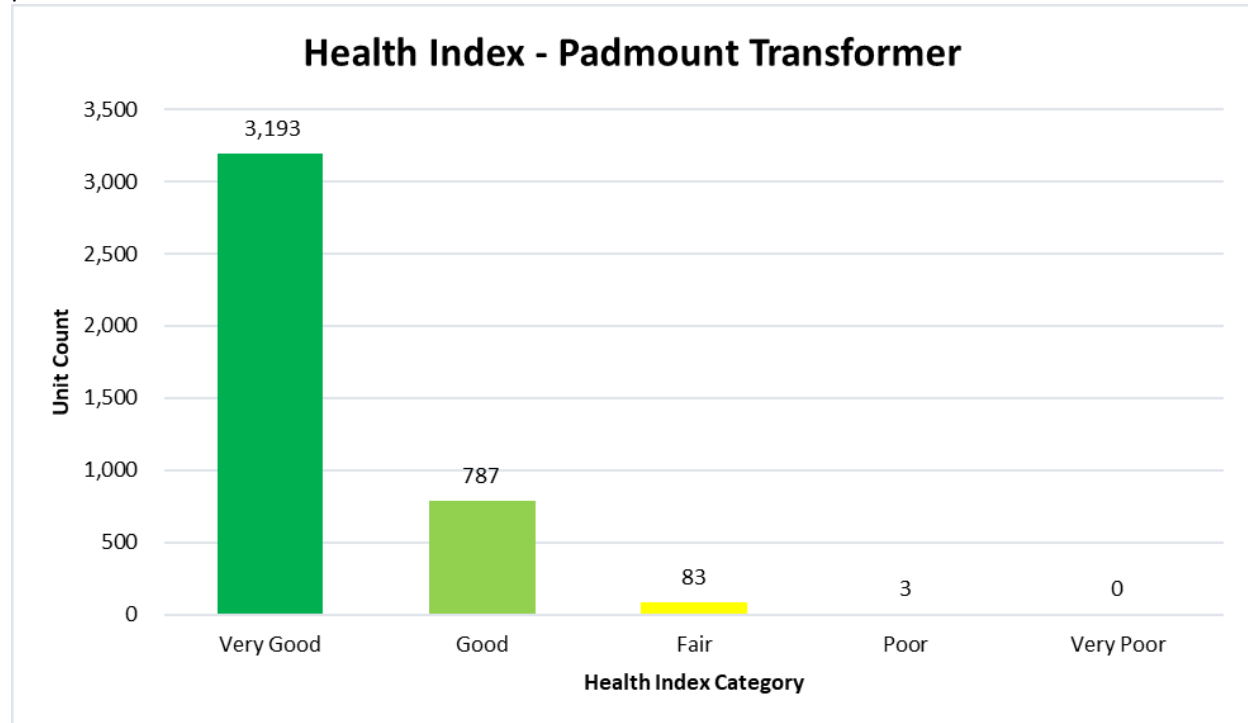
Asset Condition Relative to Typical Life Cycle

BHI owns 3,179 pole mount transformers within its service territory, of which 17 are in very poor or

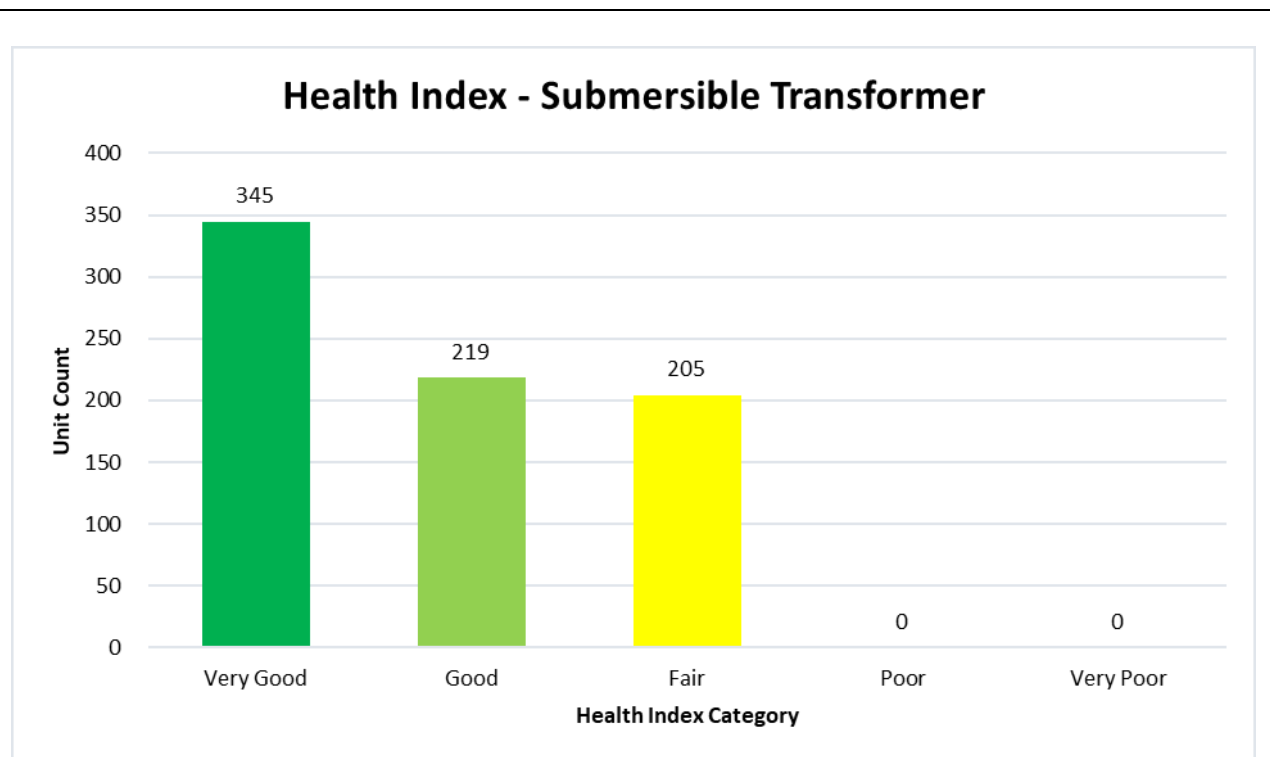
poor condition.



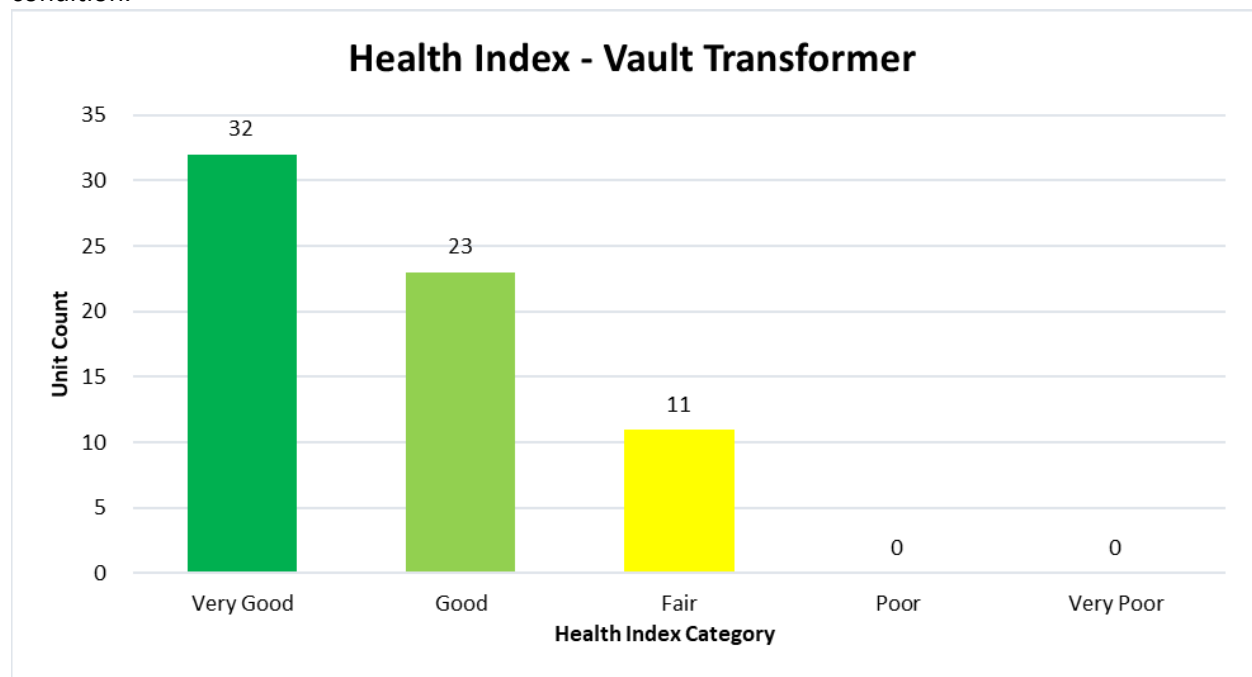
BHI owns 4,066 pad mount transformers within its service territory, of which three are in very poor or poor condition.



BHI owns 759 submersible transformers within its service territory, of which none are in very poor or poor condition.



BHI owns 66 vault transformers within its service territory, of which none are in very poor or poor condition.



Customer Impact and Risk

Quantitative customer impact varies depending on the transformers replaced and service type of those customers.

Reliability performance for the specific assets being replaced is expected to be the same or better than BHI's average since the probability of asset failure is lower with new equipment meeting current standards.

Value of Customer Impact

Customer impact in the event of failure is medium as in most cases only a small number of customers are supplied by a single distribution transformer.

Like-for-Like Renewal Analysis

BHI does not replace distribution transformers on a like-for-like basis. The new distribution transformers perform the same function as the unit that is replaced, however, BHI replaces end of life distribution transformers for residential and commercial services with high efficiency transformers which experience lower losses. New transformers are fitted with an internal current limiting fuse to prevent rupturing of the transformer tank in the event of a failure. This mitigates potential oil spills from failed transformers. BHI's standards and specifications are consistent with industry standards.

Safety

All new distribution transformer specifications and installations are built and installed in accordance with BHI and Canadian Standards Association (CSA) standards, and Ontario Regulation 22/04.

Environmental Benefits

Environmental benefits are discussed above in the Section "Like-for-Like Renewal Analysis".

Other Information**Factors Relating to Customer Preferences or Input from Customers and Other Third Parties**

Through BHI's recent customer engagement process, more than 90% of customers across all rate classes said they support BHI's strategy for spending on proactive replacement of deteriorated infrastructure.

Customers were also asked about the importance and appropriateness of planned System Renewal expenditures. More than 93% of customers rated investment in System Renewal as important and more than 87% rated proposed spending levels as appropriate.

Consideration of Non-Wires Solutions

N/A

**Program Name:** AMI Collector System conversion/upgrade**OEB Investment Category:** System Service**General Information on Project****Overview**

BHI is proposing to replace its end of life first generation (AMI 1.0) Collector System with a new AMI 2.0 Collector System. BHI's AMI 1.0 Collector System is comprised of 110 existing Honeywell/Elster Meter Collectors (Gate Keepers) and their enclosures and cellular modems. The Collector System communicates with multiple smart meters, aggregates usage data and transmits the collected data back to BHI's head-end system via a backhaul network. The current Gatekeepers in BHI's AMI 1.0 Collector System are obsolete with no availability of spares in the event of failure. The new Meter Collectors will allow for the seamless transition to a router-based communication network for BHI's smart meters and enable AMI 2.0 benefits.

AMI 2.0 Collector Systems have a number of benefits including:

- faster and more reliable communication,
- enhanced security,
- better device management,
- supports more frequent reads which allows for better demand response, programs and customer energy usage insights in near real-time,
- interoperability and integration with DERS, EV chargers and smart home devices, and
- supports future smart grid applications.

This project is aligned with BHI's smart meter replacement strategy, which includes replacement of 46,000 smart meters coming due for reverification over the DSP period. BHI is pursuing a staged approach to its smart meter replacement strategy to manage the volume of work, and pace replacement costs over multiple years to mitigate customer rate impacts. This staged approach means that BHI's pool of meters will include AMI 1.0 meters and AMI 2.0 meters for a number of years, until BHI's smart meter replacement program is completed. This requires a Collector System with the capability for both BHI's legacy AMI 1.0 meters and its new AMI 2.0 meters to communicate with the network. As such BHI is required to implement a new Collector System with hybrid technology to facilitate this. Honeywell is the only meter manufacturer that offers a hybrid solution (i.e. compatible with AMI 1.0 and AMI 2.0 technology), which avoids the need to convert all of BHI's smart meters to AMI 2.0 at once.

Scope and volume of work

The project involves replacing all 110 existing Honeywell/Elster Collectors (Gate Keepers) and their enclosures and cellular modems. This investment will be paced over a 2-year period.

Capital Investment

Program	2026	2027	2028	2029	2030
AMI Collectors	\$306,000	\$312,000	\$0	\$0	\$0

Start Date:

January 1, 2026

Key Project Dates	In-Service Date:	December 31, 2026
	Expenditure Timing:	2026, 2027
	Factors affecting the timing	Supply chain challenges and resource constraints
Comparative historical Information Comparative historical information is not available as this is a new project.		
Investment Priority This project is ranked as the 14 th highest priority project out of 52 projects. The Collector System is required to collect, aggregate and transmit meter data. The current Meter Collectors or Gate Keepers are obsolete, and Honeywell no longer offers replacement units. As existing Gate Keepers fail in the field, they will be replaced by new AMI 2.0 Meter Collectors due to their unique hybrid capabilities to communicate with both legacy and new smart meter technology. Delays in upgrading the Collector System will delay the full realization of the benefits of the new generation of AMI 2.0 meters. BHI is planning to install 46,000 of these new smart meters over the DSP period. For more details, see Sections 5.3.1.3.3 and 5.4.2.1 of the DSP.		
Project Alternatives The proposed solution is the only hybrid technology that is capable of allowing both BHI's legacy AMI 1.0 meters and its new AMI 2.0 meters to communicate with the network. Considering an alternative Collector System, which is AMI 2.0 compatible only, would require full conversion of all of BHI's smart meters to AMI 2.0 at once.		
Innovative Nature of Project The new Meter Collectors uses hybrid technology, which allows BHI's legacy meters to continue to communicate on the original EA_LAN and allows BHI's new A4 meters to communicate with the Router based SynergyNet network. Honeywell is the only meter manufacturer that has a hybrid solution (i.e. compatible with AMI 1.0 and AMI 2.0 technology) that avoids the need to replace all smart meters with AMI 2.0 meters at once.		
Evaluation Criteria and Information		
Investment Need The main driver of this project is that BHI's existing Meter Collectors are obsolete, at end of life, and are failing. Honeywell does not make a like for like replacement, so BHI must upgrade them as they fail. The second driver for this project is to modernize BHI's smart meter network and enable the smart meter 2.0 features that BHI's new A4 meters now possess. For those features to be utilized, BHI needs to upgrade its Collector System.		
Investment Justification Expenditures in this project adhere to Measurement Canada guidelines and support regulatory requirements related to billing accuracy.		
Efficiency The project will improve system operation efficiency by enabling faster more reliable meter communication, with real-time data feeding BHI's Outage Management System ("OMS") and Customer Information System ("CIS").		

Customer Value

Customers will benefit through the availability of real-time data in BHI's customer portal. They will also benefit from new programs that would allow them to utilize home analytics, vehicle to grid charging, battery storage and other DERs.

Reliability

This project will help enable real-time data flow from smart meters which, when integrated into BHI's OMS and CIS, will assist BHI's operators with identifying and locating problems in the field more quickly and effectively. It will also enable more meter features such as 1min voltage profiles, which will help identify and analyze voltage spike/sag issues in the system.

Safety

N/A

Cyber-Security and Privacy

BHI's metering infrastructure operates in a secure environment in accordance with the Ontario Cyber Security Framework.

Environmental Benefits

N/A

Statutory/regulatory obligations

Expenditures in this program adhere to Measurement Canada regulations and OEB requirements.

Conservation and Demand Management

A next generation AMI system may enable and aid the implementation of meter conservation programs by using the meter as a portal or gateway to controllable devices.

Cost Benefit Analysis

There is no cost-benefit comparison to doing nothing as Meter Collectors must be replaced when they fail and like-for-like replacement is not an option due to obsolescence of the current Meter Collectors. The only solution which balances affordability and implementation feasibility with the need to upgrade BHI's metering system to AMI 2.0, is a hybrid solution which facilitates a phased smart meter replacement.

Other Information**Factors Relating to Customer Preferences or Input from Customers and Other Third Parties**

As per BHI's recent customer engagement survey, customers were asked about the importance and appropriateness of planned System Service expenditures. More than 92% of customers rated investment in these System Service projects as important and more than 87% rated proposed spending levels as appropriate.

Consideration of Non-Wires Solutions

N/A



Material Investment Summary Document

Program Name: Intelligent Switches

OEB Investment Category: System Service

General Information on Project

Overview The Intelligent Switches program includes the installation of overhead and underground automated distribution switches. Automated distribution switches automatically sectionalize a feeder and isolate the section of the feeder impacted by an outage, eliminating the need to dispatch crews to certain outages by performing the switching remotely. This minimizes the scope of unplanned outages and results in fewer customers being impacted by a permanent or momentary outage. The program also provides safety benefits since no physical interaction is required with a remote operable switch. Furthermore, the installation of remote switches at open points in the distribution system facilitates BHI's ability to load transfer and load balance.

Scope and volume of work BHI intends to continue phasing in intelligent switches by strategically locating these switches along feeders that are more prone to interruptions, including with regard to their length, vulnerable lines (e.g., those with a documented history of poor reliability), as well as those serving customers critically sensitive to interruption duration (e.g., hospitals or data centers).

BHI intends to install two intelligent switches each year over the DSP period as part of its strategy of achieving a network of remote-operable switchgears capable of integrating into advanced restoration schemes like the Intelliteam Smart Grid Automatic Restoration System. Intelligent switches are central to BHI's grid modernization efforts as these technologies can integrate seamlessly with ADMS functionality, automating routine grid operations and expediting system restoration during abnormal conditions.

Capital Investment	Program	2026	2027	2028	2029	2030
	Intelligent Switches	\$204,000	\$312,000	\$212,200	\$324,600	\$220,800

Key Project Dates	Start Date:	January 1, 2026
	In-Service Date:	December 31, 2026
	Expenditure Timing:	Q2: \$100K Q3: \$104K
	Factors affecting the timing:	Material availability - long lead times

Comparative Historical Information

Historical Cost

Program	2021	2022	2023	2024	2025 Fcst
Intelligent Switches (OH)	0	\$171,906	\$82,397	\$11,329	0
Intelligent Switches (UG)	0	\$4,722	\$182,993	\$1,094	0

BHI installed seven intelligent switches (six overhead and one underground) at a total cost of \$454,440 over the historical period. As discussed in section 5.4.1.1 of the DSP, a number of planned installations over the historical period were deferred due to procurement delays related to the COVID-19 Pandemic or to mitigate System Renewal budget overruns due to asset failures in certain years. The increased expenditures over the forecast period are driven by a higher overall number of intelligent switch installations, including four underground intelligent switches which are more expensive units.

Investment Priority

This project was assessed using BHI's project prioritization tool and was ranked as the 42nd priority project out of 52 based on its' criticality and impact. The ranking is driven by the reliability and operational efficiency impacts of the project.

Further details are provided in Sections 5.3.1.3.3 and 5.4.2.1 of the DSP.

Analysis of Project and Project Alternatives

- **Project Alternatives**
 - **Design:** Using traditional overhead air brake switches is a feasible design alternative, but it does not provide the full benefit of feeder segmentation, which reduces the number of customers impacted by an outage. This alternative also does not allow for future integration into self-healing grid schemes.
 - **Pacing:** This project is part of a phased implementation paced across multiple years to keep pace with grid modernization objectives and avoid year-over-year budget fluctuations from large single investments. The alternative of investing in a large-scale implementation of a fully integrated automation system would be cost prohibitive.

Innovative Nature of Project

This investment contributes to BHI's goal of having a network of remote operable switches that can be incorporated into an automatic power restoration scheme – a field-proven universal smart grid solution that automatically reconfigures the distribution system after a fault and quickly restores service to feeder segments not affected by the fault.

Evaluation Criteria and Information**Investment Need**

The primary driver for this investment is reliability as the installation of intelligent switches is expected to reduce the scope and duration of outages and have a positive impact on BHI's reliability performance. A secondary driver is system operations efficiency as these devices can be controlled remotely as part of a network that can be incorporated into an automatic power restoration scheme.

Investment Justification

This project is part of BHI's grid modernization efforts of facilitating a more resilient and flexible system that leverages changes in technology to the benefit of its customers.

Efficiency

This project drives operational efficiencies through remote monitoring and control of switches, eliminating the need for crews to respond to certain outages and perform the switching manually. This improves the speed and efficiency of switching and avoids costs associated with sending crews to perform switching. These devices do not require additional inspection and maintenance compared to manual switches.

Customer Value

Customers will benefit from the following outcomes:

- **Reliability:** by installing intelligent switches at key locations along a feeder and at the tie point between two feeders, the impact of outages will typically be significantly reduced and only affect customers closer to the fault location.

- Faster communication with customers during outages as information is available to the control room almost immediately.

Reliability

Investment in this program will have a positive impact on system reliability for feeders with automated switches installed, including:

- Reduction in outage duration
- Reduction in number of customers impacted due to feeder segmentation
- Reduction in response time (devices can be operated remotely before a crew arrives on site)

Safety

Since there is no physical interaction required with a remote operable switch, the likelihood of an incident such as an arc flash occurring and causing injury to an employee or the public is significantly reduced.

Cyber-Security and Privacy

The automated switches utilized by BHI have built-in advanced technology and meet cyber security standards for protection of data in transit. Security measures are considered in both the software and hardware components of the devices and communication network utilized for the projects within this program.

Other Information

Factors Relating to Customer Preferences or Input from Customers and Other Third Parties

As per BHI's recent customer engagement survey, customers were asked about the importance and appropriateness of planned System Service expenditures, including adding more intelligent switches to help quickly isolate faulted lines and restore power. More than 92% of customers rated investment in these System Service projects as important and more than 87% rated proposed spending levels as appropriate.

Consideration of Non-Wires Solutions

N/A

**Program Name:** Buildings**OEB Investment Category:** General Plant**General Information on Project****Overview**

The Buildings program consists of investments and improvements to buildings, facilities and equipment at BHI's office and substations, and in its yard and garages.

Investments in this program vary from year to year based on specific needs identified during BHI's planning process, which include replacements and upgrades based on condition, and expansion and upgrades to accommodate BHI's workforce. To help inform and optimize BHI's capital expenditure plan for building investments, a third-party assessment was conducted in 2021 by MTE Consultants Inc.¹ that provided observations and reported on the physical conditions of BHI's building and property ("Building Condition Assessment"). The Building Condition Assessment reviewed the following systems: building structure, roofing, building envelope, mechanical systems, building electrical systems, site pavements and hardscaping, landscaping features and accessibility. This assessment identified the need for repairs to ensure the safe and effective continued operations of BHI's buildings, facilities and equipment, and prioritized the repair timeframe of these findings as immediate, short term (1-4 years) and long term (5-10 years).

The Building Condition Assessment identified that the roofing system required a significant investment over a 5-to-10-year period. Consequently, BHI contracted with Garland Canada Inc. to conduct a comprehensive roof inspection which identified areas of immediate repair and areas that required replacement within 5 years.² ("Roof Assessment Report").

In addition to the Building Condition Assessment and Roof Assessment Report, BHI conducted a 3rd party Security Assessment in 2024³ to inform its capital expenditure plan for the Buildings Program.

Additional investments in the building program are driven by expansion and upgrades to accommodate BHI's workforce.

Scope and volume of work

Scope and volume of work are based on ongoing building inspections, the findings from the third-party assessments, and workforce needs. In addition, where a structure is not in compliance with changes to applicable building codes or other Acts, BHI prioritizes the work necessary to bring such structure into compliance.

Capital expenditures proposed as part of the Buildings program as a result of the above factors include:

¹ DSP Appendix O, 2021 Building Condition Assessment Report

² DSP Appendix N, Roof Assessment Report 2021

³ Security Assessment Report, September 2024

	<ul style="list-style-type: none"> • Head Office building repairs and upgrades including roof replacement, brickwork, foundation repairs, windows and general repairs throughout the building as follows: <ul style="list-style-type: none"> ○ A large section of the roof was replaced in 2024 due to damage sustained from a storm that resulted in a leak. Future repairs have been planned in 2025 and 2026 to ensure business operations continuity and pace the significant replacement costs over multiple years. ○ Foundation repairs to address leaks and enhancements to drainage systems. If the foundation is not promptly repaired, the resulting water infiltration can interfere with BHI’s network and control system. ○ Renovations and upgrades include the addition of new offices and workstations to accommodate new Full-Time Equivalents (FTE) requirements (Further rationale for the FTE additions are provided in Section 4.3.1.1 of Exhibit 4). ○ Window replacement to address findings from BHI’s Building Condition Assessment, which identified that 50% of its windows are at or approaching their end life. BHI intends to perform a more granular third-party assessment to identify the specific window units in need of replacement. Depending on the outcome of this assessment, BHI expects to replace between 35-50% of its windows over the 2026-2030 rate period. <div data-bbox="431 1104 1442 1686" style="background-color: black; height: 277px; width: 100%;"></div> • Asphalt resurfacing and repairs to BHI’s head office north parking lot (~37,000sqft), which serves as the main parking area for employees and contractors. As identified in the Building Condition Assessment, the north
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⁴ Ibid

	<p>parking lot exhibited cracking, potholes, and localized settlement. It was recommended that 50% of the area be replaced by 2025 (within 2-4 years of the report, which was completed in 2021) and the remainder within the subsequent 1-6 years. In addition, BHI has a smaller visitor parking lot (~3,500sqft) that it plans on expanding to 20,000sqft to accommodate visitors, contractors, and additional employee parking needs, which aligns with BHI's newly implemented policy that requires visitors to use the south entrance for entry into BHI's head office, to maintain safety and security. Based on multiple cost estimates received from third parties, completing the work in 2026 is the more cost-effective option as compared to phasing the work over multiple years. The latter would increase the overall cost due to the additional mobilization and de-mobilization of labour and equipment.</p> <ul style="list-style-type: none">• HVAC System: BHI has approximately 40 HVAC units, comprised of various small and medium sized units and one large unit (condenser and air handler). These units are at or approaching the end of their useful lives and are considered to be at high risk of failure. BHI is proposing to increase the pace of replacement from 1 per year to 2-3 per year over the DSP period. The proposed pacing appropriately smooths out the rate impact and ensures that BHI has the capacity to carry out replacement work. If BHI were to instead wait for these units to fail, it could take 2-3 months to install a new unit due to current supply chain delays. Repair costs for these older units are also expected to rise to approximately 50-60% of the cost of a new unit.• MS Buildings/Property: BHI owns and maintains 32 MS buildings throughout the City of Burlington, which house critical distribution infrastructure including transformers and switchgear. To maintain the integrity of the MS buildings, and based on condition assessments, BHI plans to renovate the exterior of two MS buildings per year, including roof replacement, brick and mortar repair, soffit and siding replacement, perimeter fence replacement, and asphalt replacement. MS building renovations will be prioritized based on an assessment of their condition.					
Capital Investment	Program	2026	2027	2028	2029	2030
	Buildings	\$871,080	\$544,960	\$583,550	\$335,420	\$298,080
Key Project Dates	Start Date:	January 1, 2026				
	In-Service Date:	December 31, 2026				
	Expenditure Timing:	Q1 2026 to Q4 2026				
	Factors affecting the timing	Supply Chain issues, inclement weather and resource constraints				
Comparative Historical Information						
Project Name		2021	2022	2023	2024	2025 Fcst
Buildings		\$737,700	\$54,308	\$51,423	\$479,174	\$322,000
Average expenditures in this category were approximately \$330,000 over the 2021-2025 period, which allowed BHI to address immediate needs for maintaining its buildings, premises, and equipment. However, this pace of spending is neither adequate or sustainable for addressing the needs of BHI's						

aging facilities, and inaction could negatively impact BHI's operations. Possible consequences include risks to employee safety, business operation disruption, and more expensive corrective actions in the future. To mitigate these risks, BHI has proposed a higher level of forecasted expenditures based on specific needs identified during the planning process, and through condition assessments, to ensure safe and reliable work facilities.

Investment Priority

This investment has varying priorities depending upon specific need. Through BHI's Project prioritization tool, projects related to buildings (General Plant) range from 13th to 47th in priority.

For more details, see Sections 5.3.1.3.3 and 5.4.2.1 of the DSP.

While deferred investment in buildings and fixtures does not present an immediate material safety risk, prolonged inaction could adversely affect BHI's operations. Potential impacts include risks to employee and public safety, reduced system reliability, diminished service delivery effectiveness, and more expensive remedial measures in the future.

Analysis of Project and Project Alternatives

- i. **Do nothing:** Doing nothing is not a viable option. Without investing in the ongoing repair, replacement of, and upgrades to, BHI's building, facilities, and equipment would not be fit for employees to conduct their jobs safely and efficiently.
- ii. **Run-to-Fail:** Under this approach, BHI would delay necessary investments in its building, facilities and equipment, and would perform replacement and repairs only on a reactive basis, when an asset fails. This option would incur costs to reactively repair and replace assets, and significantly increase costs associated with reactive work, rentals and labour to accommodate long lead times for equipment and materials. The components and systems identified for replacement have exceeded their useful life and are in poor condition. This approach would also be in conflict with the OEB's Ontario Cyber Security Framework (OCSF), which stresses the importance of physical security to support utilities' cybersecurity objectives.
- iii. **Implement the proposed pacing of investments:** This is the preferred option as it allows BHI to continue to support its operations. BHI would leverage condition assessments to selectively determine assets that require maintenance, upgrading, or replacement. This option allows BHI to optimize and pace its capital expenditures by replacing assets in poor condition and retain assets that are at end of life but in good condition.

Evaluation Criteria and Information

Investment Need

The primary goal of this program is to renew and invest in BHI's non-distribution system physical assets to support day-to-day business and operations activities.

Investment Justification

BHI employs preventative inspections and maintenance to monitor its building assets, including plumbing, air systems, garage doors, windows, security systems, gates, generators, and heating/cooling systems. This proactive approach identifies and prioritizes repairs, replacements, and upgrades needed over the planning horizon. The insights inform investment plans to effectively operate buildings, facilities and equipment, enhance safety and accommodate growth.

BHI conducted three third party assessments, as described above, which assessed the condition of BHI's building, facility and equipment. BHI's proposes to upgrade or replace those components that are in poor condition to ensure employee and public safety and the effective operation of its buildings, facilities and equipment.

Efficiency

Investments in buildings and fixtures ensures that BHI's facilities remain modern, clean, safe, and secure. These investments will foster a conducive environment for its staff that maintains operational efficiency.

Customer Value

A modern, clean, and safe environment ensures that staff can undertake their work effectively and efficiently address the needs of BHI's customers.

Reliability

The investments made under the Buildings program allow BHI to maintain facilities that are critical to BHI's operations. In addition to providing a safe working environment for BHI employees who manage the day-to-day operations of BHI's distribution system, these buildings and facilities house equipment and materials that are necessary to maintain the reliability of the distribution system.

Safety

Proactively repairing, replacing, or upgrading damaged, obsolete, or end-of-life building assets is critical to preventing failures that could compromise employee and public safety. This initiative ensures that BHI operates in a secure workspace with functional assets that comply with the latest health and safety standards, safeguarding the well-being of staff and maintaining operational continuity.

Cyber-Security and Privacy

Visitor management: protocols and parking for guests limit the risk of unauthorized individuals accessing sensitive areas of the building.

Surveillance and monitoring: security cameras and monitoring systems deter threats, help track suspicious activities and protect against cyber threats from physical breaches.

Environmental Benefits

Recent advancements in building mechanical components have significantly transformed the industry. BHI carefully reviews these innovations when making replacement decisions, ensuring that upgrades align with modern standards and enhance efficiency, reliability, and sustainability.

Statutory/regulatory obligations

Maintaining a secure, safe and efficient building ensures that BHI meets its statutory obligations related to cybersecurity, privacy and workplace safety. BHI is obligated to comply with the following applicable regulations:

- OSCF and Information and Privacy Commissioner of Ontario (IPC) – protection of physical assets helps to reduce risk of cyber threats and privacy breaches.
- Occupational Health and Safety Act (OHSA) – BHI is obligated to protect workers from violence and harassment. Surveillance and monitoring ensures workers are protected from security breaches. Providing ergonomic workstations protects workers from work-related injuries.

Ensuring buildings and facilities are in good condition promotes a safe work environment where hazards are avoided (e.g. flooding).

Conservation and Demand

Replacing HVAC systems can contribute to more efficient operations and reduced energy costs.

Quantitative and Qualitative Analysis

BHI adheres to its Purchasing Policy⁵ to ensure the best value in terms of cost, service, product and delivery time. Project-specific alternatives are assessed on a case-by-case basis based on the identified need.

Factors Relating to Customer Preferences or Input from Customers and Other Third Parties

As per BHI's recent customer engagement survey, customers were asked about the importance and appropriateness of planned General Plant expenditures, including replacing the roof and parking lot of BHI's head office building to ensure safety and business continuity. More than 88% of customers rated investment in General Plant as important and more than 84% rated proposed spending levels as appropriate.

⁵ Appendix C, Exhibit 2

**Program Name:** Other Computer Hardware & Software**OEB Investment Category:** General Plant**General Information on Project****Overview**

This program includes Informational Technology/Operational Technology (IT/OT) investments related to productivity, cybersecurity, risk management, privacy, compliance and data governance. These investments are critical to ensuring operational resilience and safeguarding BHI's assets, data, information, systems and hosting facilities; and include servers, cyber security tools, network communications, personal computers, collaboration software tools, data and inventory management tools, and budgeting and forecasting software. Modernizing IT/OT infrastructure and strengthening cybersecurity defenses enables the organization to continue to meet current business demands, protect data, and prepare for future growth. These investments align with business strategic goals to enhance efficiency, minimize risks, and deliver value to stakeholders and customers.

Key Objectives for this program:

1. **Modernize IT Infrastructure:** Replace outdated solutions to improve reliability, scalability, and performance.
2. **Enhance Cybersecurity:** Continue to mitigate against evolving risks from cyber threats and ensure compliance with regulatory standards.
3. **Support Business Continuity:** Build robust systems for incident response, disaster recovery and business continuity.
4. **Boost Productivity:** Leverage advanced tools and technologies to streamline workflows and improve employee output.
5. **Drive Digital Transformation:** Enable innovation and efficiency by adopting cutting-edge solutions.

Scope and volume of work

The scope includes the modernization of IT/OT infrastructure, implementation of cybersecurity controls, and enhancement of systems to improve operational efficiency, ensure data protection, and support business continuity. Capital expenditures include the costs associated with planning, procurement, installation, testing, and deployment of hardware and software.

Forecasted expenditures address the following needs:

- Continued investment in cybersecurity tools and platforms to enhance cyber security readiness in accordance with the Ontario Cyber Security Framework¹ (OCSF) and the OEB's Ontario Cyber Security Standard²;

¹ Ontario Cyber Security Framework (OCSF) v 1.1, December 7, 2023

² Ontario Cyber Security Standard, March 27, 2024

	<ul style="list-style-type: none">Disaster Recovery and Business Continuity investments to mitigate the impact of unplanned business interruption;IT/OT investments to modernize network and server infrastructure and end user technology (personal computers, productivity and collaboration tools) to ensure consistent performance and scalability through increasing computing requirements; and,Digital transformation initiatives including artificial intelligence and advanced analytics to support process automation and data-driven real-time decision making.					
Capital Investment	Program	2026	2027	2028	2029	2030
	Other Computer Hardware & Software	\$484,500	\$381,680	\$283,287	\$251,024	\$405,168
Key Project Dates	Start Date:			January 1, 2026		
	In-Service Date:			December 31, 2026		
	Expenditure Timing:			Q1 to Q4 2026		
	Factors affecting the Timing:			None		
Comparative historical Information						
Program		2021	2022	2023	2024	2025 Fcst
Other Computer Hardware & Software		\$98,105	\$380,257	\$617,764	\$356,473	\$457,200
<p>Investments in this program fluctuate annually based on evolving business needs and priorities identified throughout the year. Average forecasted expenditures over the 2026-2030 rate term are consistent with average historical expenditures.</p> <p>Investment Priority</p> <p>The investments under this program have varying priorities depending upon specific needs. Through BHI’s project prioritization tool, projects related to this program (aside from the mandatory Cyber Security Implementation) range from 24th to 52nd in priority.</p> <p>Prioritizing IT/OT and cybersecurity investments ensures that resources are allocated to areas with the highest impact on BHI corporate objectives.</p> <p>For more details, see Sections 5.3.1.3.3 and 5.4.2.1 of the DSP.</p> <p>Analysis of Project and Project Alternatives:</p> <ul style="list-style-type: none">Do nothing or reduce investment: This is not a viable option and escalates the risk that existing IT/OT infrastructure will not be fit to support BHI’s operations. For example:<ul style="list-style-type: none">The consequence of a reduction in IT hardware infrastructure (e.g. servers, personal computers) would result in IT equipment being operated beyond its useful life and hardware will no longer be supported by vendors. This poses several risks such as service outages, insufficient capacity to support growing data volumes and processing requirements; obsolete equipment may result in increased exposure to cybersecurity attacks data loss and service unavailability. This will result in software compatibility issues and jeopardize any changes, improvements and upgrades to IT Software.						

- Limited investment in Cybersecurity could lead to the inability to maintain compliance with the OCSF, and prevent innovation in the Cybersecurity space resulting in the inability to cope with evolving cybersecurity threats.
- Limited investment in communication infrastructure increases operational risks. Communications equipment that is run past the end of its useful life results in obsolete hardware that is no longer supported by vendors, resulting in the inability to perform the necessary upgrades or access patches to respond to future industry challenges such as electrification.
- Implement the proposed pacing of investments. Modernizing IT/OT infrastructure and strengthening cybersecurity defenses enables BHI to continue to meet current business demands, protect data, and prepare for future growth. Further details are provided in the Evaluation Criteria and Information Section below.

Innovative Nature of Project:

1. Continued adoption of Next-Generation Cybersecurity Solutions

- Proactive Threat Mitigation: Implementing advanced threat detection systems, such as artificial intelligence (AI)-powered tools, enables the organization to predict and neutralize cyber threats in real time.
- Identity and Access Management (IAM): Seamless access to systems through features like multi-factor authentication (MFA) and single sign-on (SSO).
- Integrated Cybersecurity Frameworks: Unified platforms that manage endpoint protection, network monitoring, and threat intelligence in a cohesive way.

2. Cloud-Driven IT/OT Modernization

- Virtualization and Scalability: Moving workloads to virtualized environments allows for dynamic scaling of resources, reducing hardware dependency and optimizing energy consumption.
- Server Virtualization for Backups: Creating virtual backups of critical data ensures rapid recovery from potential data loss or cyberattacks.

3. Empowering Digital Transformation

- AI and Automation: Leveraging AI for business processes, such as predictive maintenance and process optimization, introduces smarter, faster ways of operating.
- IT Productivity Tools: Automating routine IT tasks with advanced tools like robotic process automation (RPA) frees up resources for strategic innovation.

4. Enhancing Customer Experience and Operational Excellence

- Personalized Services: Advanced IT systems enable data-driven insights to create personalized customer experiences.

5. Leveraging Big Data and Analytics

- Predictive Analytics: Advanced IT systems process large volumes of data to forecast trends and mitigate risks proactively.
- Real-Time Monitoring: Employing tools that provide live insights into IT and network performance ensure proactive problem-solving.

6. Supporting Hybrid and Remote Work Models

- Cloud-Based Collaboration: Investment in remote collaboration tools empowers teams to work seamlessly from anywhere.

- Securing Remote Access: Advanced VPNs and zero-trust architecture ensure that employees can access resources securely while working remotely.

7. Futureproofing Through Continuous Innovation

- Digital Ecosystem Development: Building IT/OT systems that can integrate future technologies, such as quantum computing and advanced IoT networks.

Evaluation Criteria and Information

Investment Need

The primary drive for IT/OT and cybersecurity investments is the need to build a secure, efficient, and scalable digital infrastructure that supports the organization's operations, growth, and innovation while safeguarding critical assets from cyber threats.

As organizations become increasingly reliant on technology for day-to-day operations, customer engagement, and decision-making, investments in IT/OT and cybersecurity ensure that systems are robust, agile, and protected against disruptions.

Objectives of IT/OT and Cybersecurity Investments

1. Enhancing Cyber Resilience

- Objective: Safeguard systems, data, and networks against emerging threats such as ransomware, phishing, and insider attacks.

2. Ensuring Regulatory Compliance

- Objective: Meet Ontario Cyber Security Framework (OCSF) requirements by OEB.

3. Improving Operational Efficiency

- Objective: Streamline business operations and reduce IT/OT downtime through modernized infrastructure and automated workflows.

4. Supporting Business Growth and Digital Transformation

- Objective: Create a scalable IT/OT framework that supports innovation, agility, and strategic business initiatives.

5. Protecting Business Reputation

- Objective: Maintain customer and stakeholder trust by ensuring the confidentiality, integrity, and availability of digital systems.

6. Supporting Remote and Hybrid Work Models

- Objective: Ensure seamless and secure access to organizational resources for a distributed workforce.

Investment Justification

Investing in Information / Operational Technology (IT/OT) and cybersecurity is critical to deliver efficiencies, provide customer value and system reliability, and ensures the following:

1. Business Continuity and Risk Management

- Business Continuity and Disaster Recovery: Investing in IT infrastructure ensures that systems are resilient to disruptions.
- Cyber Security Risk Management: Cybersecurity investment protects against potential data breaches, ransomware, and other attacks that could lead to downtime or even business failure.

- **Minimize Financial Risk:** Cyberattacks can lead to significant financial losses through direct theft, fines for non-compliance, or damage to the organization's reputation. IT and cybersecurity help mitigate these risks.

2. Protection of Sensitive Data

- **Data Confidentiality, Integrity, Availability and Privacy:** Protecting sensitive data (e.g., financial information, personal data) is critical for maintaining customer trust and brand reputation. Cybersecurity investments (e.g., encryption, access control) ensure that data is protected from unauthorized access and breaches.

4. Customer Trust and Brand Reputation

- **Enhanced Customer Confidence:** A strong IT/OT and cybersecurity framework signals to customers that their data is being protected, fostering trust.
- **Preventing Brand Damage:** A cyberattack that compromises customer data or disrupts services can lead to long-term damage to a company's reputation. Proactive investment helps protect against such events, preserving brand integrity.

5. Operational Efficiency and Productivity

- **Optimized IT/OT Infrastructure:** Investing in modern IT/OT systems can improve efficiency, reduce downtime, and support better collaboration and communication across teams. This enhances productivity and supports growth.
- **Automation and Scalability:** IT investments in automation (e.g., cloud computing, AI-driven solutions) can streamline business operations, reduce human error, and scale processes to meet growing business demands.

7. Employee Productivity and Security

- **Remote Work and Endpoint Security:** With an increase in remote work, ensuring that employees' devices (laptops, mobile phones) are secure is critical. Investing in endpoint security systems helps secure remote connections and data.
- **Efficient IT Support:** A robust IT infrastructure reduces issues that employees may face, leading to less downtime and more focus on core work tasks.

Risk Management, Cyber-Security and Privacy

Risk Management, Cybersecurity and Privacy are critical components of IT/OT investments, providing a range of benefits that enhance the effectiveness, reliability, and security of IT/OT systems as follows:

1. Protection Against Cyber Threats

- **Preventing Data Breaches:** Cybersecurity measures, such as encryption, firewalls, and intrusion detection systems, help prevent unauthorized access to sensitive data. This protection ensures that critical business and customer data is secure from theft or exposure.
- **Defense Against Ransomware and Malware:** IT investments in cybersecurity defenses (e.g., endpoint protection, secure networks) significantly reduce the risk of malware and ransomware attacks that could paralyze operations and result in financial losses.
- **Mitigating Advanced Persistent Threats (APTs):** Cybersecurity investments are crucial for defending against sophisticated, long-term cyberattacks (APTs) that target critical infrastructure and remain undetected for extended periods. IT systems, combined with advanced cybersecurity tools, offer layered defenses against such threats.

2. Business Continuity and Downtime Prevention

- **Minimized Operational Disruptions:** Cybersecurity protects against attacks that could cause severe system downtime, such as DDoS (Distributed Denial of Service) attacks or data breaches. Well-

protected IT infrastructure ensures that operations continue without interruption, supporting business continuity.

- **Disaster Recovery Capabilities:** Many cybersecurity tools integrate with IT/OT systems to offer backup and disaster recovery options. If a security incident occurs, businesses can quickly recover from data loss or system failures, maintaining continuity and minimizing the impact of cyberattacks.

3. Regulatory Compliance

- **Auditing and Monitoring Capabilities:** Effective cybersecurity investments include tools for continuous monitoring and auditing of IT/OT systems. These capabilities help organizations maintain compliance and provide documentation for audits, proving that proper security measures are in place.

4. Maintaining Customer Trust

- **Building Confidence in Services:** A robust cybersecurity framework reassures customers that their personal information is being handled securely. This builds trust, which is vital for customer reputation management.
- **Avoiding Brand Damage:** Cyber incidents can result in public breaches of trust, tarnishing a company's reputation. Preventing such incidents with strong cybersecurity helps maintain the integrity of the brand and assures customers that their information is secure.

5. Preventing Financial Losses

- **Reducing the Impact of Cybercrime:** Cyberattacks, including fraud, data theft, and ransomware, can result in significant financial losses. Cybersecurity investments minimize the risk of such attacks, reducing the direct and indirect financial impact.
- **Lowering Legal and Regulatory Costs:** Organizations facing a data breach may incur legal costs, fines, and penalties. By proactively securing IT systems, companies reduce the likelihood of these expenses and avoid the financial burdens associated with non-compliance.

6. Employee Productivity and Security

- **Secure Remote Work:** With the rise of remote work, ensuring that employees can safely access company systems is a top priority. Cybersecurity tools such as secure VPNs and cloud access, as well as endpoint security protect remote workers and their devices from cyber threats.
- **Reduced IT Support Burden:** Cybersecurity tools can proactively detect and prevent issues before they become widespread. This reduces the time and effort IT teams spend on troubleshooting and allows them to focus on strategic initiatives.

7. Long-Term Organizational Resilience

- **Future-Proofing IT Systems:** Cybersecurity investments not only protect against current threats but also help organizations adapt to new and emerging security challenges. As technology evolves, cybersecurity measures evolve to safeguard new systems, platforms, and data types, ensuring long-term resilience.
- **Scalable Security Solutions:** As IT systems scale with business growth, cybersecurity measures can be scaled up to match the expanding digital landscape. This adaptability ensures that cybersecurity investments continue to provide value as the organization grows and evolves.

Statutory/regulatory obligations

To meet Ontario Cyber Security Framework (OCSF) requirements by OEB.

Factors Relating to Customer Preferences or Input from Customers and Other Third Parties

As per BHI's recent customer engagement survey, customers were asked about the importance and appropriateness of planned General Plant expenditures. More than 88% of customers rated investment in these General Plant projects as important and more than 84% rated proposed spending levels as appropriate.



Program Name: Vehicles

OEB Investment Category: General Plant

General Information on Project

Overview

The Fleet program includes investments in BHI's passenger vehicles, bucket trucks and trailers. BHI's fleet are critical assets in supporting the safe and efficient delivery of BHI's capital projects and emergency response efforts. BHI has developed a Fleet Management Plan ("FMP") to help determine optimal dates for replacement and future fleet needs, attached as Appendix L to the DSP. BHI prioritizes fleet replacements based on a number of evaluation criteria including age, mileage, type of usage, reliability, maintenance and repair costs, condition, and uniqueness of the vehicle.

Scope and volume of work

The Fleet program includes investments in BHI's passenger vehicles, bucket trucks and trailers. BHI assesses whether to replace its fleet in accordance with the framework provided in its FMP. The following table outlines the vehicles that will be replaced during the forecast period:

Vehicle Classification	Vehicle Type	2026	2027	2028	2029	2030	Total
Rolling Stock (>4500 kg)	Single Bucket truck	1	1				2
	Dump Truck	1					1
	Flatbed Truck		1				1
	Radial Boom Derrick			1	1		2
	Cable Reel Trailer		1		1		2
	Equipment			1	1		2
	Single Bucket truck - Repair	1					1
Rolling Stock (>4500 kg) - Total		3	3	2	3	0	11
Rolling Stock (<4500 kg)	Pickup Truck	2	1				3
	Van	2	1				3
	Trucks/Vans/Cars		2	3	2	4	11
Rolling Stock (<4500 kg) - Total		4	4	3	2	4	17
Total		7	7	5	5	4	28

In 2026, the majority of BHI's fleet capital expenditure dollars are in the large truck category (Rolling Stock >4500 kg), including replacement of a single bucket truck, a dump truck used as a multi-purpose vehicle for hauling dirt/stone/screenings for a variety of maintenance and capital projects, and expenditures to modify an existing bucket truck with an electronic Power Take Off (ePTO). An ePTO is an advanced system that provides electric power to auxiliary functions in vehicles, replacing traditional mechanical or hydraulic PTO systems. This technology is particularly beneficial for commercial and industrial vehicles, such as bucket trucks, by enabling them to operate more efficiently and sustainably.

The remainder of the expenditures are for the replacement of small vehicles (pickup trucks and vans) that support day-to-day operations.

Capital Investment	Program	2026	2027	2028	2029	2030
	Vehicles	\$1,031,220	\$911,040	\$744,822	\$684,906	\$267,168
Key Project Dates	Start Date:	January 1, 2026				
	In-Service Date:	December 31, 2026				
	Expenditure Timing:	Q1 to Q4 2026				
	Factors affecting the Timing:	Supply chain delays, chassis availability for large trucks, EV charging infrastructure development				

Comparative historical Information

Program	2021	2022	2023	2024	2025 Fcst
Vehicles	\$57,511	\$373,790	\$458,935	\$420,500	\$950,000

Over the historical period, BHI replaced 27 small vehicles to support its operations. BHI witnessed significant delays in purchasing large vehicles during the 2021-2024 period due to long lead times and manufacturing delays outside of BHI's control, leading to the deferral of several large vehicle replacements.

The increase in cost in the DSP period compared to the historical period is attributed to the type of vehicles being replaced. As indicated above, 11 of the 28 assets that BHI proposes to replace during the 2026-2030 rate period are for larger equipment (>4,500kg) such as bucket trucks, which are significantly more expensive than smaller equipment (<4,500kg) such as pickup trucks. Forecasted costs are based on existing quotes from vendors and previous purchase prices. An unknown factor is the impact of tariffs on fleet costs.

Investment Priority

This investment was assessed using BHI's project prioritization tool (as further described in Section 5.4.1.2.4 of the DSP) based on its impact on each asset management objective. Fleet Replacement is divided into >4,500kg replacements and <4,500 kg replacements which were ranked as the 19th and 33th priority, respectively out of 52 projects. The ranking is driven by the operational efficiency impacts if the asset is not replaced and fails.

For more details, see Sections 5.3.1.3.3 and 5.4.2.1 of the DSP.

Analysis of Project and Project Alternatives

- Effect of the investment on system operation efficiency and cost-effectiveness**
 The reliability of this equipment is critical to completing planned capital projects and responding to emergencies efficiently and cost-effectively. Scheduled replacement of vehicles is informed by the FMP.
- Net benefits accruing to customers**
 Customer benefits from this investment include reliable and timely outage response, and cost-effective delivery of BHI's capital program.
- Impact of the investment on reliability performance including frequency and duration of outages**
 The reliability of this equipment is critical to responding to unplanned outages and minimizing the duration of customer interruptions. It is critical that the fleet of large truck vehicles is always operable and available for use. In 2024, BHI experienced several months of down time due to mechanical issues with the two large trucks which it plans to replace in 2026 and 2027.

- **Project Alternatives**

One alternative is to rent some of these vehicles on an as needed basis. This alternative is not feasible as these vehicles are used daily and need to be readily available for emergency response. The availability of rental vehicles (bucket trucks) is limited due to a lack of inventory in the rental market.

Another alternative is to delay vehicle replacement and continue to operate them beyond their useful life. BHI delays replacements for as long as feasibly possible. Vehicles that are designated as ‘needs immediate consideration’ based on the evaluation criteria in the FMP (age, mileage, type of usage, reliability, maintenance costs, condition, and uniqueness of the vehicle), are scheduled for replacement. To operate these vehicles beyond this point would impair BHI’s ability to have access to reliable vehicles and respond to emergencies

Innovative Nature of Project

BHI has introduced electric vehicles to its fleet over the past 3 years. In 2026, BHI plans to install an ePTO (as described above) in its diesel-powered bucket truck, which can contribute to the reduction of BHI’s carbon footprint.

As part of BHI’s commitment to corporate sustainability, the company will replace end-of-life vehicles, including small trucks and cars, with electric or hybrid alternatives wherever feasible. BHI has been adopting EVs under a structured approach. BHI strategically chose to purchase EVs in its light truck category first (i.e. vehicles that are not designated for an on-call response) to determine the effects of colder weather and other factors, such as hauling on EV’s performance. BHI will continue to evaluate and invest in the development of electric vehicle infrastructure, such as charging ports, to support this initiative. For its large trucks (such as bucket trucks), BHI will continue to replace its fleet with non-electric options as market data is not sufficient to justify investments in EVs for these vehicle types.

Evaluation Criteria and Information

Investment Need

The main driver of the investment is to support BHI’s operations, maintenance and capital activities. All vehicles that are being replaced are at the end of life and at risk of being unavailable to support the safe and efficient delivery of BHI’s capital projects and emergency response efforts.

Investment Justification

BHI has developed a **FMP** to strategically manage and replace its fleet in a cost-effective and operationally reliable manner. The program uses a **Fleet Evaluation Matrix** (attached as Appendix M to the DSP) to evaluate each vehicle using consistent and objective criteria, allowing BHI to prioritize replacements based on operational need and asset condition.

The Fleet Evaluation Matrix includes the following criteria:

- Age: 1 point per year of service (based on in-service date)
- Mileage: 1 point per 16,093 kilometers (10,000 miles)
- Type of Service: Light, medium, or heavy-duty classification
- Reliability: Frequency of repairs (e.g., monthly, bi-monthly)
- Maintenance & Repair Costs
- Fleet Condition: Body and interior condition, rust, anticipated repairs, and accident history

This scoring system supports BHI’s proactive approach to fleet planning and ensures vehicles are replaced at the optimal time—before they become unreliable or costly to maintain.

During the 2026-2030 rate period, BHI plans to replace **28 vehicles**, of which **11 are larger trucks** that require more substantial capital investment than smaller vehicles. Forecasted expenditures reflect the replacement of vehicles that are currently at, or expected to reach the end of, their service lives; BHI is not planning to increase the size of its fleet as part of this Application.

As part of the FMP, five large trucks have been identified as high-priority replacements based on evaluation scores above 27 points, which qualifies them under the program as requiring “Immediate Consideration – Perform Detailed Evaluation”:

- Truck 23 – Score: 37
46-foot single bucket truck used daily for emergency restoration and service connections
- Truck 24 – Score: 36
46-foot single bucket truck used daily for emergency restoration and service connections
- Truck 32 – Score: 36
F350 multi-use vehicle supporting various operational functions
- Truck 31 – Score: 30
F650 dump truck used for transporting materials (e.g., stone, screenings, dirt, transformers) for both emergency and capital projects
- Truck 35 – Score: 30
Radial Boom Derrick truck used for material handling, pole transportation, hole augering, and pole setting

Customer Value

While this equipment is critical for responding to unplanned outages, this equipment also enables BHI to provide required service upgrades that BHI’s customers need on a day-to-day basis.

Reliability

The reliability of this equipment is critical to responding to unplanned outages and minimizing the duration of customer interruptions.

Safety

BHI proactively maintains its fleet on an ongoing basis, but the safety risk to BHI employees increases with aging vehicles and equipment.

Environmental Benefits

Newer vehicles are generally more fuel efficient and have fewer emissions. BHI is also pursuing electrification of its fleet where feasible.

Benefits of innovative nature of project

BHI is pursuing electrification of its fleet where feasible.

Quantitative and Qualitative Analysis

The Fleet Evaluation Matrix is used to inform the replacement of any vehicle. Scores are driven by age, mileage, type of usage, reliability, maintenance costs, condition, and uniqueness of the vehicle.

Factors Relating to Customer Preferences or Input from Customers and Other Third Parties

As per BHI's recent customer engagement survey, customers were asked about the importance and appropriateness of planned General Plant expenditures, including spending on truck fleet to support day-to-day operations of the system. More than 88% of customers rated investment in General Plant as important and more than 84% rated proposed spending levels as appropriate.

Business Case Justification

N/A

**Program Name:** SCADA Replacement / ADMS Acquisition**OEB Investment Category:** General Plant**General Information on Project****Overview**

This project is to replace BHI's aging Supervisory Control and Data Acquisition (SCADA) system and procure a fully integrated Advanced Distribution Management System (ADMS).

As energy demand grows, electrification accelerates, and distributed energy resources (DERs) become more prevalent, BHI must modernize its grid management capabilities to ensure system reliability, operational efficiency, and regulatory compliance.

BHI's existing SCADA system, acquired in 2007, lacks enhanced functionality that modern SCADA systems can deliver when integrated with Outage Management Systems (OMS). By implementing an integrated SCADA and ADMS solution from the same vendor as its OMS provider, BHI will benefit from enhanced system interoperability, streamlined operations, and a more cohesive approach to grid management.

Scope and volume of work

The scope of the project includes the complete replacement of BHI's existing SCADA system and implementation of an ADMS, including:

- System Design and Architecture: Defining requirements and designing the technical architecture for the new ADMS.
- Hardware and Software Procurement: Acquiring necessary hardware, licenses, and vendor support services.
- Data Migration and Validation: Migrate historical data and grid performance data to the new ADMS platform
- Implementation of Key Features: Including real-time grid monitoring, fault detection and restoration, demand response, and predictive analytics.
- Training and Knowledge Transfer: Providing staff training and ensuring smooth transition to the new system.

Capital Investment

Program	2026	2027	2028	2029	2030
SCADA Replacement/ ADMS Acquisition	\$0	\$3,640,000	\$0	\$0	\$0

The estimated cost includes software and hardware procurement, testing, and deployment. It does not include costs associated with integrating with existing BHI applications or the cost of field hardware. BHI will be in a better position to accurately forecast these costs as part of the project preparation phase.

Key Project Dates

Start Date:	Jan 1, 2027
In-Service Date:	Dec 31, 2027
Expenditure Timing:	Jan 1, 2027 to Dec 31, 2027

	Factors affecting the timing	Several key factors influence the timing including regulatory approval of an Incremental Capital Module (ICM), successful parallel system operation, testing, validation and system integration
<p>Comparative historical Information</p> <p>Comparative historical information is not available as this is a new project. Although BHI previously implemented a SCADA system, it was over 15 years ago and historical costs associated with that implementation are outdated and not reflective of current estimated project costs. BHI will acquire ADMS for the first time, and as such no prior comparative data exists for its implementation.</p> <p>Investment Priority</p> <p>BHI considers this investment to be a high priority. A modern SCADA and ADMS solution will provide real-time monitoring and control, predictive analytics, and automated fault detection, enabling faster outage response, proactive grid optimization, and enhanced customer service capabilities. ADMS will support integration and dispatching of renewable energy sources more effectively, optimizing voltage and load balancing, and facilitating demand response programs. With evolving energy transition and grid modernization mandates, this investment is essential to meeting regulatory expectations while maintaining a secure, flexible, and future-ready grid.</p> <p>Analysis of Project and Project Alternatives</p> <p>Alternate Option 1: Status Quo (Do Nothing)</p> <p>Maintaining the existing SCADA system without upgrades or ADMS implementation would leave BHI with significant operational challenges and increasing risks as the grid evolves.</p> <ul style="list-style-type: none"> • Limited System Reliability and Resilience: The current SCADA system lacks advanced automation and real-time analytics, increasing the likelihood of longer outages and slower response times. Without predictive maintenance capabilities, equipment failures may go undetected until they escalate into service disruptions, affecting reliability. • Inability to Support Grid Modernization and Growth: Rising electrification, DER adoption, and customer energy demands require a more dynamic and flexible grid management system. The existing SCADA system cannot effectively manage bidirectional power flows, dynamic load balancing, or DERs, leading to inefficiencies and reliability challenges. • Regulatory and Compliance Risks: The OEB is raising performance expectations for LDCs, including feeder-level reliability reporting and improved outage communications. A failure to modernize could result in non-compliance with evolving regulatory standards. • Increasing Maintenance and Cybersecurity Risks: The aging SCADA infrastructure is becoming more difficult and expensive to maintain, increasing the risk of service disruptions and exploitation of security vulnerabilities. Without sophisticated cybersecurity controls, the system remains at higher risk of compromise which could affect service to customers. 		

The Do Nothing approach would lead to operational inefficiencies, higher outage risks, cybersecurity vulnerabilities, and risk of regulatory non-compliance. As the grid evolves, the limitations of the current SCADA system would become more pronounced, affecting both operational performance and customer service.

Alternate Option 2: SCADA Upgrade Only

Upgrading the SCADA system without implementing ADMS would provide some incremental improvements in system monitoring and control, but would fail to deliver the full benefits of grid automation and optimization.

- **Improved Monitoring but Limited Automation:** A SCADA upgrade would enhance real-time visibility of grid operations, but it would not enable advanced automation such as Fault Location, Isolation, and Service Restoration (FLISR) or Optimized Voltage Regulation (VVO & CVR). Outage restoration would still rely on manual intervention, limiting efficiency gains and prolonging service disruptions.
- **Partial Grid Modernization without Full DER Integration:** While a new SCADA system could provide better data collection and situational awareness, it would not support full DER Management (DERM) integration, making it difficult to manage DERs effectively. Without ADMS, the system would lack dynamic load balancing and predictive grid management, leaving BHI unable to fully optimize its grid.
- **Operational Efficiencies would remain limited:** A SCADA-only upgrade would not provide advanced analytics and would limit BHI's ability to proactively identify grid issues and optimize asset performance.
- **Regulatory and Compliance Considerations:** A SCADA-only upgrade would help improve system monitoring and reporting, but it would not meet the OEB's evolving expectations for outage response and performance transparency. Without ADMS, BHI would still face challenges meeting regulatory performance targets.

A SCADA-only upgrade would provide marginal improvements in system monitoring and control but would fail to deliver key operation, reliability, and efficiency benefits. Without ADMS, BHI would be unable to capitalize on the opportunity to modernize its grid, integrate DERs, and enhance automation.

Innovative Nature of Project

SCADA replacement and ADMS acquisition is a major step forward in how BHI manages and optimizes its distribution grid. New and enhanced functionality includes Fault Detection, Isolation and Recovery (FDIR), advanced analytics and predictive maintenance, integration of DERS, automation and control, cloud-based solutions and scalability. ADMS acquisition is innovative in its approach to modernizing BHI operations by enabling better real-time decision-making and automating control functions. By leveraging cloud technology, and advanced analytics, the project will facilitate grid modernization.

Evaluation Criteria and Information

Investment Need

The existing SCADA system, while historically adequate for monitoring and control in a traditional grid setup, faces several limitations in the context of modern grid demands and evolving industry standards. The current system limits BHI's ability to take advantage of two-way SCADA control to enable enhanced functionality such as automated FLISR, Voltage and Reactive Power Optimization, and real-time monitoring and analytics.

The current SCADA system does not integrate with a functional ADMS and therefore, optimized grid operations and integrated features would not be available. Implementing an ADMS will require an upgraded SCADA infrastructure capable of providing a fully integrated solution for enhanced efficiency, improved customer satisfaction and automation.

Investment Justification

The electricity sector is undergoing significant transformation as electrification, DERs, extreme weather events, and evolving cybersecurity threats reshape how the grid is managed. As energy demand increases and customers expect more responsive service, BHI must modernize its systems to improve operational efficiency, grid resilience and customer experience.

- **Electrification and Growing Energy Demand:** The demand for electricity is rising due to the electrification of transportation and heating, increased housing development, and industrial expansion. As more EVs, heat pumps, and energy-intensive industries come online, traditional grid management tools are becoming insufficient. Upgrading SCADA and implementing an ADMS will provide real-time system visibility, automated load balancing, and enhanced distribution system flexibility to manage increasing demand.
- **Integration of DERs:** DERs introduce bidirectional power flows and variability that require advanced grid management tools to manage. An ADMS can optimize DER dispatch, voltage regulation, and system balancing, ensuring a more stable and reliable grid.
- **Increasing Reliability and Resilience Requirements:** Extreme weather events are becoming more frequent, posing new risks to grid infrastructure. At the same time, reliability will become increasingly important as customers become more dependent on electricity for heating and transportation. Upgrading SCADA and integrating ADMS will support system reliability and resilience.
- **Cybersecurity and Grid Protection:** As interconnectivity and digitization increases, so does the probability of cyberattacks on Ontario's energy infrastructure. A modern SCADA system with enhanced security controls and advanced monitoring will help mitigate these risks while ensuring continuous and secure grid operations.
- **Evolving Customer Needs and Expectations:** As electrification accelerates, customers' reliance on the distribution grid real-time communications, and the ability to exert more control over their energy usage are becoming increasingly important. An upgraded SCADA system and ADMS provides the ability to meet these expectations by improving outage management and supporting future customer-driven energy solutions.

Efficiency

The integration of modern SCADA systems in distribution networks leads to significant improvements in system efficiency, reliability, and resilience. By leveraging real-time data, automation, advanced analytics, and AI, SCADA systems enable BHI to optimize grid operations, reduce losses, and improve customer satisfaction.

Real-Time Monitoring and Data Collection

- **Continuous Monitoring:** Unified solutions provide real-time visibility into the status of various components in the distribution network, including transformers, feeders, switches, and substations.
- **Early Fault Detection:** Real-time monitoring helps detect abnormalities, such as voltage sags, harmonics, or equipment malfunctions, allowing for proactive maintenance before these issues escalate.

Improved Grid Stability and Reliability

- **Fault Detection and Isolation:** New planned systems can automatically detect faults in the network and isolate affected sections to prevent widespread outages. This functionality is crucial for reducing downtime and ensuring system reliability.
- **Predictive Maintenance:** By analyzing historical and real-time data, new systems can predict equipment failures and schedule maintenance, reducing unplanned outages and extending the lifespan of assets.

Enhanced Load Management and Demand Response

- **Load Balancing:** The new solution will facilitate balancing loads across the network by monitoring consumption patterns and redistributing power as needed to prevent overloading and inefficiencies.
- **Demand Response Programs:** By integrating with Advanced Metering Infrastructure (AMI) and demand response systems, new unified solutions can help BHI manage peak demand periods by incentivizing consumers to reduce their energy usage.

Operational Flexibility and Scalability

- **Scalable Architecture:** Planned systems will be designed to be modular and scalable, allowing BHI to easily expand its networks and integrate new technologies without significant overhauls.
- **Interoperability:** Support for open communication protocols and integration with other systems.

Customer Value

The implementation of a new SCADA system and ADMS will not only enhance BHI's grid operations but also deliver direct, tangible benefits to customers. Key customer benefits include:

- **Service Reliability:** Advanced analytics will enable more proactive operational responses, allowing BHI to identify trends, predict system vulnerabilities, and implement targeted solutions. For example, analytics could identify recurring outages caused by tree contacts, prompting strategic infrastructure upgrades to mitigate future risks and improve overall grid resilience.

- **Enhanced Communication:** Real-time outage notifications and more accurate estimated restoration times will keep customers informed and prepared.
- **Energy Efficiency Tools:** By integrating demand response capabilities and supporting energy efficiency programs, customers will have greater ability to manage their energy usage and costs.
- **Greater choice through DER Integration:** Customers will benefit from better grid integration of customer-owned DERs, allowing for more choice and flexibility in energy solutions.

Reliability

Enhanced Grid Stability and Reliability: New planned systems can automatically detect faults in the network and isolate affected sections to prevent widespread outages. This functionality is crucial for reducing downtime and supports improved system reliability. By analyzing historical and real-time data, new systems can predict equipment failures and schedule maintenance, potentially reducing unplanned outages and extending the lifespan of assets.

Real-Time Monitoring and Data Collection: ADMS will provide continuous real-time visibility into key distribution network components, including transformers, feeders, switches, and substations, allowing operations to detect abnormalities such as voltage sags, harmonics or equipment malfunctions. This proactive monitoring will enable early fault detection and intervention, preventing certain minor issues from escalating into major outages.

Safety

By integrating data from multiple sources, ADMS improves situational awareness, reduces risks, and ensures safer operations for both field crews and customers. As BHI continues to modernize its systems, the safety benefits provided by new ADMS will be crucial in creating a safer and more resilient distribution network for both operators, field crews and customers.

Remote Monitoring of Hazardous Conditions: The new system will detect issues like overheating transformers, downed power lines, or other safety hazards in real-time, triggering automated responses.

Proactive Maintenance Alerts: By predicting equipment failures before they happen, new SCADA systems help BHI address potential safety issues promptly.

Real-Time Crew Dispatch and Management: New ADMS will optimize crew dispatch by providing accurate information about the location and nature of faults, helping crews to respond more efficiently. Crews are better prepared for the conditions they will encounter, reducing the risk of accidents due to unexpected situations.

Automated Lockout/Tagout Procedures: The new solution can automate lockout/tagout procedures, ensuring equipment is safely de-energized before maintenance begins. This reduces the risk of accidental energization, which is a leading cause of electrical injuries among electrical utility workers.

Geospatial Mapping of Hazards: ADMS can highlight areas with downed power lines, damaged equipment, or other hazards on geospatial maps. This assists crews to avoid dangerous areas and approach repairs more cautiously, reducing the likelihood of injuries.

Cyber-Security and Privacy

The aging SCADA infrastructure is becoming more difficult to maintain, increasing the risk of service disruptions and exploitation of security vulnerabilities. Without sophisticated cybersecurity controls, the system remains at higher risk of compromise.

As interconnectivity and digitization increases, so does the probability of cyberattacks on Ontario's energy infrastructure. A modern SCADA system with enhanced security controls and advanced monitoring will help mitigate these risks while ensuring continuous and secure grid operations.

Environmental Benefits

A new unified solution provides a range of environmental benefits by enhancing grid efficiency, supporting renewable energy integration, and optimizing the management of resources.

Statutory/regulatory obligations

The OEB and Ministry of Energy and Mines (MOEM) have established clear expectations for grid modernization, operational efficiencies, and reliability improvements. BHI's investment in SCADA and ADMS upgrades are required to deliver on these expectations and support broader provincial energy objectives.

Ontario Energy Board Expectations

BHI's SCADA and ADMS investments support several key OEB initiatives:

- **Reliability and Power Quality Review**
- **Distribution Sector Resilience and Responsiveness** – The OEB identifies ADMS as a critical tool for improving system resilience, efficiency, and outage response, particularly in the face of increasing extreme weather events¹.
- **Feeder-Level Reliability Reporting** – ADMS enhances real-time monitoring and reporting, allowing BHI to support the OEB's goal of increasing transparency and customer awareness of system reliability².
- **DSC Amendments** – The OEB has introduced new minimum requirements for communication with customers during widespread outages, which an ADMS will support³.
- **Updated Reliability Performance Targets** – As Ontario's energy transition accelerates, the OEB expects distributors to meet higher performance standards, ensuring grid reliability keeps pace with customer needs⁴.

Operational Efficiency and System Modernization: The OEB expects LDCs to strengthen governance, improve operational efficiencies, and modernize grid infrastructure to meet growing electrification demands and evolving system complexities. SCADA upgrades and

¹ Distribution Sector Resilience and Responsiveness, December 4, 2024

² Implementing Voluntary Feeder-Level Reliability Reporting, January 30, 2024

³ Proposed Amendments to the Distribution System Code to Set Minimum Requirements for Customer Communication Regarding Interruptions and Restoration of Service Following Severe Weather Events, December 16, 2024

⁴ Setting Reliability Performance Targets, January 28, 2025

ADMS implementation will help BHI further automate outage management and response, optimize grid performance, and improve real-time decision-making to align with these efficiency goals.

Ministry of Energy & Mines Expectations The MOEM has set broader policy priorities to support Ontario's energy transition, economic growth, and affordability objectives. BHI's SCADA and ADMS investment aligns with these key priorities as follows:

- **Ensuring System Reliability Amid Growth and Extreme Weather:** The Ministry has emphasized that LDCs must modernize their grids to handle increasing electricity demand while maintaining reliability and resilience⁵. Upgraded SCADA and ADMS will provide enhanced grid automation, predictive maintenance, and outage response capabilities, ensuring a stable and efficient electricity system as demand grows.
- **Supporting Housing and Economic Development:** The Minister's most recent Letter of Direction to the OEB highlights the need for grid infrastructure investments that support housing expansion and industrial growth⁶. SCADA upgrades and ADMS will help BHI plan for and allocate capacity efficiently, ensuring the grid is prepared for future development.
- **Avoiding Under-Building & Proactively Expanding Grid Capabilities:** The Ministry has cautioned against under-investing in grid capacity, urging LDCs to take a proactive approach to system expansion⁷. SCADA upgrades and ADMS will provide data-driven insights to support long-term planning and strategic infrastructure investments, ensuring BHI is well-positioned to meet Ontario's future energy needs.

Benefits of innovative nature of project

A modern SCADA and ADMS solution will provide real-time monitoring and control, predictive analytics, and automated fault detection, enabling faster outage response, proactive grid optimization, and enhanced customer service capabilities. An ADMS will support integration and dispatching of renewable energy sources more effectively, optimizing voltage and load balancing, and facilitating demand response programs. With evolving energy transition and grid modernization mandates, this investment is essential to meeting regulatory expectations while maintaining a secure, flexible, and future-ready grid.

Business Case Justification

The SCADA Replacement and ADMS Acquisition Business Case is attached as Appendix B to Exhibit 2.

⁵ The Ministry of Energy and Electrification's Ontario's Affordable Energy Future Paper, October 2024

⁶ Ministry of Energy and Electrification's Letter of Direction to the OEB, December 19, 2024, p3

⁷ Ministry of Energy and Electrification's Letter of Direction to the OEB, December 19, 2024, p4



Material Investment Summary Document

Program Name: ERP Replacement

OEB Investment Category: General Plant

General Information on Project

Overview	<p>With a rapidly evolving business environment, it is crucial for BHI to have robust and efficient systems in place to manage its operations. The current ERP system has been able to meet most of BHI's business requirements over the past 20 years, but it is now outdated and unable to meet the growing demands of the business. BHI has made several modifications to address operational and regulatory changes in the industry, but these changes can be costly and difficult to make, and in many cases do not address new functionality requirements from the business.</p> <p>This proposal outlines the need to replace BHI's existing ERP system with a more advanced and scalable solution that will, among other things, simplify adherence to utility regulations and standards, include built-in security features to protect data, automate manual tasks and reporting, centralize data, adapt to new services such as EV charging, and facilitate departmental integration.</p> <p>The new ERP system, which will include enhanced accounting, procurement, project management, risk management, compliance, and supply chain modules, is expected to improve user productivity through increased functionality and features. Improved work order management functionality will expedite field-based services to customers. The new ERP system is expected to deliver operational efficiencies through streamlined business processes.</p>
Scope and volume of work	<p>Scope of Work</p> <p>Implementation is proposed for 2029 and is comprised of several steps as follows:</p> <p>Requirements Gathering</p> <ul style="list-style-type: none">• Conduct stakeholder interviews and workshops to gather functional, technical, and reporting requirements.• Document and validate all requirements, ensuring alignment with organizational goals. <p>ERP System Selection</p> <ul style="list-style-type: none">• Identify and evaluate potential ERP vendors.• Invite qualified vendors to participate in RFP process.• Conduct demonstrations and proof-of-concept sessions.• Finalize the selection of the ERP system based on a comprehensive evaluation matrix. <p>System Design and Configuration</p> <ul style="list-style-type: none">• Configure the new ERP system to meet organizational needs.• Customize features as required to address specific business requirements.• Develop workflows, user roles, and permissions. <p>Integration</p> <ul style="list-style-type: none">• Integrate the ERP system with existing applications• Test integrations to ensure proper data flow and functionality.

	<p>Testing</p> <ul style="list-style-type: none">• Perform unit, system, and integration testing to identify and resolve issues.• Conduct User Acceptance Testing (UAT) with key stakeholders.• Validate that the system meets all functional / performance requirements. <p>Training</p> <ul style="list-style-type: none">• Develop training materials, including user manuals.• Conduct training sessions for end-users and administrators. <p>Deployment and Go-Live</p> <ul style="list-style-type: none">• Develop a deployment plan, including cutover strategies and rollback procedures.• Monitor the go-live process to address any issues promptly.• Provide post-implementation support during the stabilization period. <p>Post-Implementation Support</p> <ul style="list-style-type: none">• Offering ongoing technical support and system maintenance.• Address user feedback and make necessary adjustments.• Conduct a post-implementation review to assess project success and identify lessons learned. <p>Volume of Work</p> <ul style="list-style-type: none">• Data Volume: Migration or transition of approximately 1 TB of data from legacy systems.• Integration Points: Estimated 5-10 critical systems requiring integration.																		
Capital Investment	<table><tr><th>Program</th><th>2026</th><th>2027</th><th>2028</th><th>2029</th><th>2030</th></tr><tr><td>ERP Replacement</td><td>\$0</td><td>\$0</td><td>\$1,061,000</td><td>\$1,082,000</td><td>\$0</td></tr></table>	Program	2026	2027	2028	2029	2030	ERP Replacement	\$0	\$0	\$1,061,000	\$1,082,000	\$0						
Program	2026	2027	2028	2029	2030														
ERP Replacement	\$0	\$0	\$1,061,000	\$1,082,000	\$0														
Key Project Dates	Start Date:		Q1 2028																
	In-Service Date:		Q4 2029																
	Expenditure Timing:		Implementation is projected for Q1 2028 – Q4 2029, with a targeted cutover for Q4 2029.																
	Factors affecting the timing		Regulatory approval of future ICM request																
<p>Comparative historical Information</p> <p>Comparative historical information is not available as this is a new project. BHI implemented its current ERP system over 20 years ago, making historical data outdated and not reflective of current estimated project costs. The forecasted expenditure is based on a high-level cost estimate and will be updated based on the business case and Request for Proposal (RFP) process.</p>																			
<p>Investment Priority</p> <p>BHI has considered the priority of this investment based on the business needs and requirements as explained in this document.</p>																			
<p>Project Alternatives</p> <p>The primary alternative to this project is to continue using BHI’s existing ERP system, which:</p> <ul style="list-style-type: none">• has limited scalability to support business growth,• has inadequate integration with other systems and applications,• is not easy to use or simple to navigate,• employs outdated interfaces,																			

- is resulting in increasing maintenance and operational costs, and
- has a lack of advanced features required for modern business operations.

Continuing to maintain the current ERP system poses several risks, including potential software failures, business process disruptions, errors from manual processes, increased cybersecurity risks, compatibility issues with third-party applications and systems, and lost opportunities for productivity improvements. BHI does not consider this a viable alternative due to these risks. The final ERP solution (platform, vendor) will be determined based on a comprehensive list of functional requirements as part of the RFP process.

Effect of the Investment on System Operation Efficiency and Cost-Effectiveness

- The new ERP is expected to deliver operational efficiencies through streamlined business processes, automated reporting, more accurate and detailed end user reporting, reduced manual entry and reduced risk of input errors.

Evaluation Criteria and Information

Investment Need

The primary driver of this investment is business operations efficiency. Implementing a modern ERP solution will enable BHI to effectively address its evolving business requirements due to changing regulatory, compliance, automation and information security landscapes. Key examples include:

1. **Business Process Efficiency:** The primary driver for investing in a new ERP system is to enhance business process efficiency. The new ERP will streamline business processes, automate reporting, allow for more accurate and detailed end-user reporting, reduce manual entry, and minimize the risk of input errors.
2. **Technological Obsolescence:** The existing ERP application modules are approaching obsolescence due to the lack of vendor support and other functional deficiencies.
3. **Regulatory and Compliance Requirements:** The new ERP system will ensure continuous compliance with industry standards, regulations, and cybersecurity frameworks.
4. **Scalability and Integration:** The new ERP system will be designed to scale, in alignment with business growth and will integrate seamlessly with other systems and applications, ensuring efficient data flow and process automation.
5. **End-User Experience:** The new ERP system will deliver improved user experience, boosting productivity and user satisfaction through an intuitive interface.

Investment Justification

The ERP is a critical business system supporting several key areas of BHI's day-to-day activities including finance, operations, supply chain, engineering, planning and human resources. Utilities are dealing with increased volume and digitization of data, and BHI must adapt its systems to effectively leverage this data to meet the needs of the business and its customers.

Efficiency

A new ERP system is expected to enable the following efficiencies:

1. Streamline business processes by automating routine tasks and reducing manual data entry, which minimizes the risk of errors and enhances productivity.
2. Employ advanced analytics and reporting capabilities to support better decision-making.
3. Accommodate business growth and integrate seamlessly with other systems and applications, ensuring smooth data flow and process automation.

Customer Value

More efficient work order management will support expedited field-based services to customers.

Cyber-Security and Privacy

The new ERP system will play a crucial role in supporting cybersecurity and privacy by protecting sensitive data and ensuring compliance with regulations and information security frameworks such as the Ontario Cyber Security Framework (OCSF). Privacy controls for customer and employee data will be incorporated into the new ERP system to ensure continued compliance with current standards.

Quantitative and Qualitative Analysis

A business case will be developed prior to the start of the RFP process, which will include a qualitative and quantitative analysis of the project.

Factors Relating to Customer Preferences or Input from Customers and Other Third Parties

As per BHI's recent customer engagement survey, customers were asked about the importance and appropriateness of planned General Plant expenditures, including replacing the ERP to optimize performance and efficiencies. More than 88% of customers rated investment in General Plant as important and more than 84% rated proposed spending levels as appropriate.

Risks

- **Implementation Challenges:** ERP implementations can be complex and time-consuming, requiring careful planning and project management.
- **Change Management:** Employees may resist changes to established processes and systems. Effective change management strategies are essential to ensure a smooth transition.
- **Data Migration:** Migrating data from legacy systems to the new ERP system can be challenging and may require additional resources.



Burlington **hydro** inc.

Appendix B

BHI's 2025 Business Plan



Burlington **hydro** inc.

NOVEMBER 2024

BHI 2025 Business Plan



Confidential

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Part A

Business Overview



Executive Summary

The purpose of Burlington Hydro Inc.'s (BHI's) business plan is to provide a forward-looking roadmap that aligns our energy delivery and service commitments with the evolving needs of our customers and stakeholders. This plan outlines our strategy to enhance operational effectiveness, adapt to the energy sector's rapidly changing landscape, and prioritize customer and stakeholder engagement while ensuring value, reliability and resilience in our services and operations.



The strategic priorities and initiatives for 2025 and 2026 include:

- Provide exceptional internal and external customer service across the organization.
- Deliver electricity safely and reliably by renewing deteriorated components of the system most at risk of failure.
- Provide comprehensive public safety awareness education/communications and maintain a culture that prioritizes safety for employees and customers.
- Upgrade the distribution system by hardening the grid to respond to increasing extreme weather events.
- Enhance support for Distributed Energy Resources (DERs) integration and electric vehicle (EV) infrastructure to support a sustainable energy transition.
- Respond to and prepare for increased demand and customer growth in specific areas of our service territory.
- Continuous investment in technology that helps reduce electricity distribution costs, provides consumer choice and creates business value.
- Invest in workforce planning and training programs to equip employees with skills for a digital environment. Focus on talent acquisition, development, and retention to build a future ready workforce.
- Deliver electricity at prudent and value-based distribution rates.

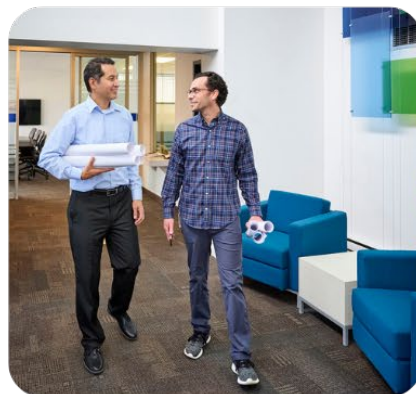
The Ontario energy landscape that BHI operates in is undergoing transformational change driven by growth, electrification, technological advancements, policy and regulatory shifts, and evolving consumer expectations. These changes create both challenges and opportunities for BHI and the broader industry. The importance of, and public focus on, sustainability, resilience, and reliability, especially in light of climate change, increases the pressure on BHI to be proactive in its planning. To meet future demands, BHI must ensure it has the capacity to innovate while maintaining and hardening its grid. Inadequate planning could lead to delays in grid modernization, service interruptions, and an inability to meet regulatory and government net-zero targets.

These challenges and opportunities are compounded by anticipated housing growth and the need to replace aging distribution infrastructure. Additionally, evolving customer expectations now expect more personalized, seamless, and responsive service experiences, as well as options for energy efficiency and DER choices. This will require new roles focused on customer service and internal support.

BHI conducts extensive customer engagement with customers to understand customer priorities and expectations. Insights gained include:

- A strong interest in sustainability and renewable energy choices.
- A need for enhanced communication, especially during outages or service changes.
- Desire for greater transparency on service costs and energy options.
- Customers are aligned with BHI's strategic priorities of providing safe and reliable electricity at prudent rates.
- Customers place value on proactively replacing deteriorated infrastructure, upgrading the distribution system to respond to increasing extreme weather, and investing in new and innovative technology to modernize the grid.

Through this business plan, BHI is committed to fostering a customer-centric approach, emphasizing value, reliability, and innovative approaches to enhance its operations and prepare for the energy transition. This plan will ensure that BHI remains a leader in delivering safe, efficient, resilient and reliable energy solutions.



Company Overview

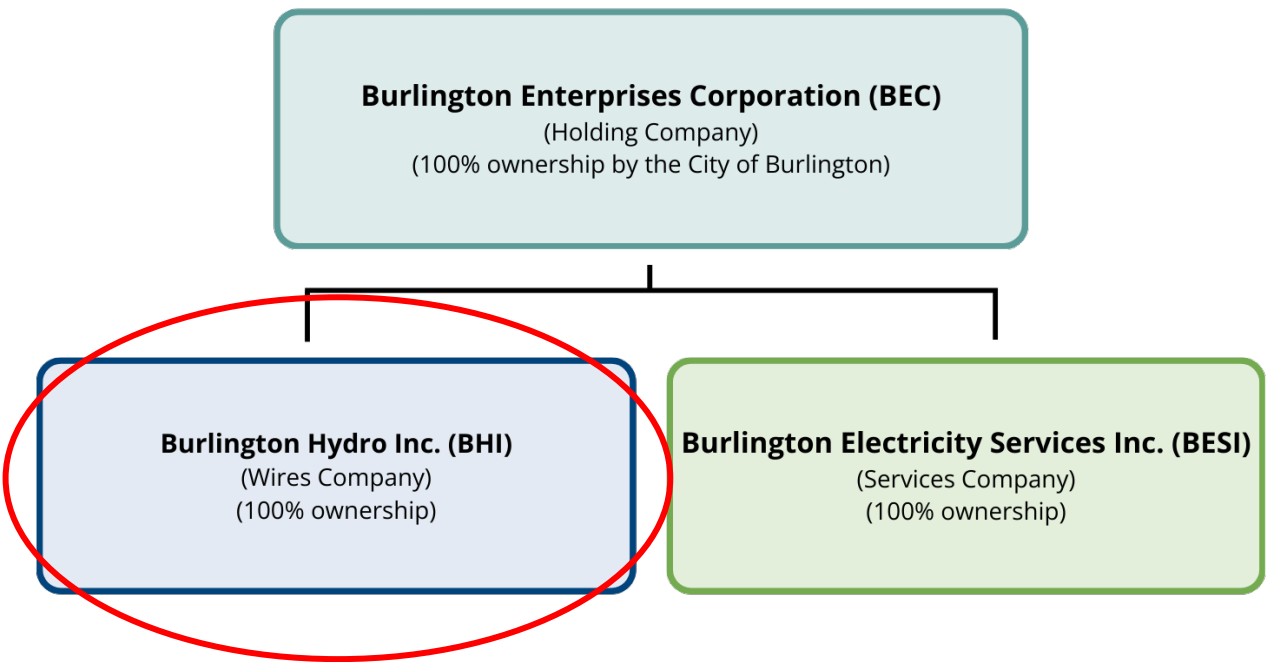
History and Corporate Structure

Established in 1945, Burlington Hydro is an energy services and local distribution company (LDC) in the Ontario electricity distribution market, serving the City of Burlington. Serving approximately 69,000 residential and commercial customers consisting of Residential, General Service, Street Light, and Unmetered Scattered Load customers/connections. With a total licensed service area of 188 square kilometres, Burlington Hydro operates 32 substations and maintains 1,600 kilometers of medium voltage distribution lines to ensure reliable electricity delivery.

Following changes to the *Electricity Act* and the introduction of the *Energy Competition Act* in 1998, Burlington Hydro was established as a private corporation. Formally, Burlington Hydro had operated in a not-for-profit capacity as a hydro-electric commission (HEC) with powers laid out under the Public Utilities Act and the Power Corporation Act.

Burlington Hydro was incorporated and wholly transferred into the ownership of the City of Burlington on January 1, 2000, as a for-profit company. At that time, the City created a holding company, Burlington Hydro Electric Inc., to oversee two subsidiary companies: a regulated “wires” company, Burlington Hydro Inc., and an unregulated company, Burlington Electricity Services Inc.

Burlington Hydro Electric Inc. (BHEI) was re-structured and renamed Burlington Enterprises Corporation (BEC) in 2019, to align with best practices in utility governance.



Purpose Statement

Today's reliable energy partner for tomorrow's innovative community.

We serve the residents and businesses of Burlington with reliable energy, committing to exceptional customer service and empowering customers through valuable tools and resources.

At Burlington Hydro, we are set apart by our unwavering focus on operational effectiveness and our dedication to safety and customer service. This commitment enables our customers to concentrate on what matters — keeping life moving and our community thriving.

Mission

To provide reliable, efficient, and safe energy solutions to the community.

Vision

To be recognized as a leading energy solutions provider and customer-focused LDC.

Core Values



Burlington Hydro Cares for People

We interact with customers, employees, the public, and our business partners with integrity and respect, and at all times act in a safe, responsible and professional manner.



Burlington Hydro Cares for the Community

We take pride in making significant contributions to our community by supporting local business development activities and delivering important safety programs to our schools. We are committed to supplying our community with electricity for the long term.



Burlington Hydro Cares about Stewardship

We value the long-term health and sustainability of Burlington Hydro and will ensure availability of a future electricity supply that meets customer needs and growth. We value the community we serve and the environment in which we operate, managing risks to eliminate or minimize adverse impacts associated with our businesses.



Burlington Hydro Cares about Performance

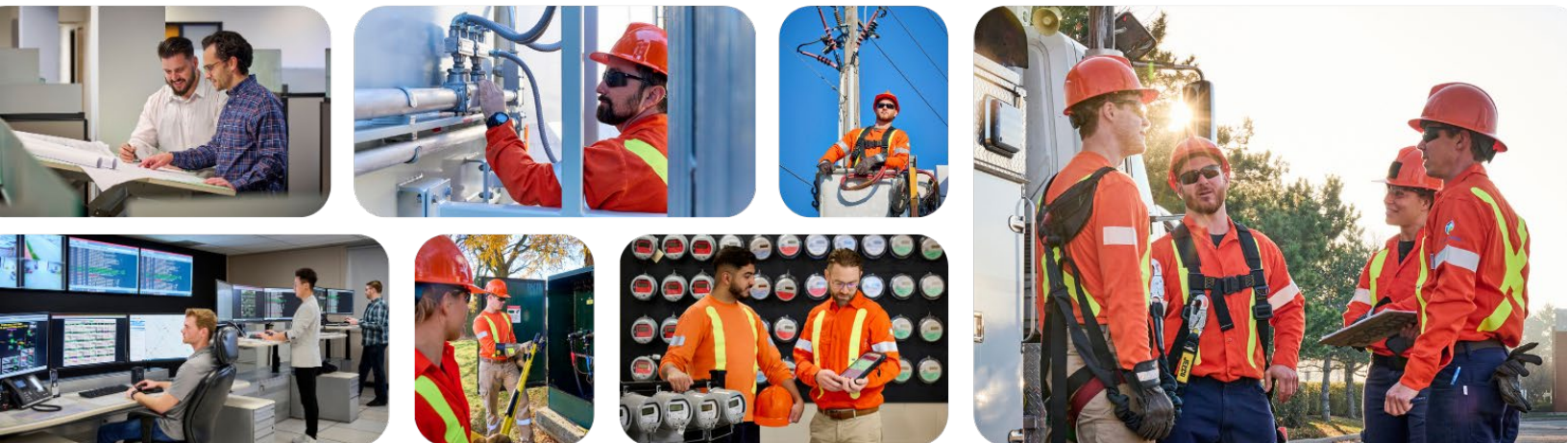
We value a balanced, sustainable business model. We deliver superior products to our customers in a safe and efficient manner, striving for excellence and continuous improvement in all aspects of our business.

Overview of Core Business Functions

Operations & Engineering

BHI has secured enough capacity with its new Transformer Station (TS) to accommodate the City's target of an additional 100,000 people (over the next 20 to 30 years), along with a managed strategy for the move to electrification. Operations & Engineering departments are essential to planning, building, and maintaining a safe, resilient, and reliable distribution network.

- **Engineering:** BHI's engineering department is central to designing and planning Burlington's power distribution system, managing both overhead and underground infrastructure. As BHI anticipates the impacts of the energy transition, emerging technologies, and digitalization, the engineering department has realigned into three key functional areas:
 - Customer Connections and Key Accounts
 - System Planning and Asset Management
 - Capital Projects and Energy Transition
- **Powerlines:** The Lines crews are on the front lines of service and maintenance. They install new poles, transformers, wires, and customer connections while maintaining safe and reliable service through ongoing infrastructure upgrades and emergency response.
- **Stations:** Responsible for maintaining 32 municipal stations within BHI's service territory, the Stations team conducts tests on suspect cables, locates faults on primary cables, installs smart switches and supports emergency response.
- **Metering:** The Metering team maintains approximately 69,000 meters within BHI's service area and investigates power quality issues. The team also supports ongoing upgrades to support next-generation metering and provide enhanced tools for improved service and data accuracy. This team also supports emergency response and frontline response to customer trouble calls.
- **Control Room:** Acting as the overarching 'controlling authority' for the Electrical Distribution Network, the Control Room is responsible for authorizing and documenting all work conducted on the network. This team ensures operational safety and system integrity, managing real-time responses to maintain a secure and reliable distribution network.



Finance

Finance encompasses several critical departments responsible for safeguarding financial resilience, ensuring regulatory compliance, and supporting efficient operations and strategic growth. Collectively, these departments—Regulatory Affairs, Conservation and Demand Management, Billing, Supply Chain, Capital Planning, and Accounting and Financial Reporting—work together to reinforce BHI’s commitment to customers, continuous improvement, and sustainable growth.

Key priorities across these departments include:

- **Regulatory Affairs:** Managing rate-setting, regulatory filings, Cost of Service applications, and policy review/implementation, Regulatory Affairs ensures alignment with regulatory standards while balancing customer affordability and long-term operational needs.
- **Conservation and Demand Management:** With Ontario’s new conservation and demand management (CDM) framework launching in 2025, the focus will be on implementing energy efficiency programs that support sustainability goals for both customers and the broader grid.
- **Billing:** Responsible for billing residential, small commercial, and large commercial accounts, ensuring accuracy and clarity in invoicing while offering customers access to helpful programs and resources.
- **Supply Chain:** Amid ongoing price and lead-time volatility for essential materials and services, supply chain priorities include cost containment, purchasing and contract management, closely monitoring inventory, adapting re-order practices, and exploring alternative suppliers. These efforts ensure access to key materials and mitigation of cost increases on labor-intensive services like powerline technician services, tree trimming and utility locates.
- **Capital Planning:** In alignment with the Distribution System Plan (DSP), capital planning efforts are concentrated on creating and monitoring the overall budget for infrastructure investments that address reliability, electrification, and sustainable growth for Burlington’s community.
- **Accounting and Financial Reporting:** Responsibilities include overseeing the budgeting process, managing accounts payable/receivable, cash flow management, debt service and credit use, and refining processes to ensure accurate, timely financial reporting. Regular financial analysis provides leadership with insights for strategic, informed decision-making.



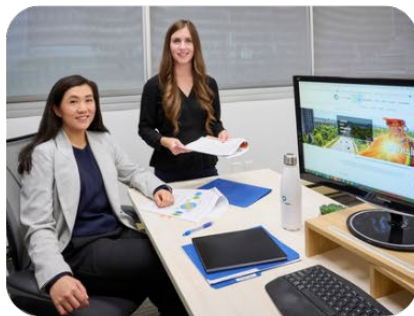
Human Resources

Human Resources (HR) at BHI is committed to building a supportive, high-performance workforce through a People Strategy that positions BHI as a top employer within the utility sector. This strategy aligns HR practices with BHI's strategic goals and addresses critical areas such as:

- Strategic Talent Acquisition & Recruitment
- Workforce Readiness
- Employee Retention & Development

BHI aligns its HR team and leadership competencies to execute these objectives which includes:

- Supporting business continuity and sustainable people practices
- Managing talent through a strategic lens
- Supporting meaningful employee engagement efforts and managing turnover
- Driving succession planning for frontline leaders, aligned with leadership competencies
- Promoting organizational culture and enhancing employee engagement
- Reducing recruitment and retention costs by utilizing competency-based processes
- Strengthening the talent brand to reinforce BHI as a Top Employer
- Supporting meaningful career development and talent mapping



Health & Safety

The Health & Safety (H&S) department drives BHI's commitment to a strong safety culture, guided by the company's Five-Year Health and Safety Strategic Plan ('Safety Plan') and the Health, Safety, and Environment Management System (HSEMS). These frameworks support a proactive approach to risk mitigation and continuous improvement in workplace safety. The Safety Plan focuses on preparing for the future by:

- Adopting more progressive safety systems and technology to enhance automation and digitization to reduce manual involvement.
- Leveraging a strong safety culture during times of rapid change in technology and demographics.
- Integrating accountability for safety across all levels of the organization.
- Adding effective leading indicators.
- Supporting employee mental health and wellbeing.

BHI fosters a safety-first environment by empowering employees to participate actively in H&S initiatives, with managers and supervisors leading by example. Additionally, the department continuously assesses best practices to advance beyond the Workplace Safety and Insurance Board's (WSIB) Safety Excellence standards.

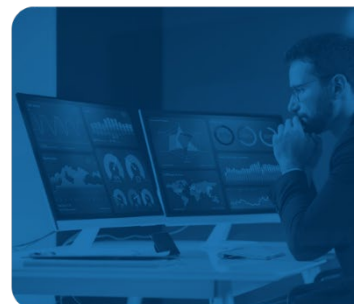
Information Technology

The Information Technology (IT) department plays a crucial role in supporting the organization's strategic objectives through technology investments, cybersecurity initiatives, and system integration. To align with Burlington Hydro's strategic direction, the IT department is undergoing a realignment, establishing an enhanced governance framework that promotes decentralized empowerment under a unified IT umbrella. This realignment is expected to deliver:

- Enhanced organizational and operational efficiencies
- Improved alignment across departments
- Strengthened cybersecurity measures

BHI's technology principles have evolved over the last few years to align more closely with organizational objectives and the changing technology landscape within the industry, to guide key technology related investments including:

- Ensuring Information, Technology and Security Services investments are focused on emerging trends and grid modernization.
- Continuous Enterprise-Wide Integration of Information, Operation and Internet of Things Technology.
- Strategic deployment of information and operation technology services.
- Continuous engagement with GridSmartCity for shared services and knowledge.
- Continuous improvement in evolving technology related skill sets.
- Managing effective IT governance for enterprise technology needs, including products and services delivery.



- Delivering meaningful Data Analytics, Business Intelligence and Predictive Analysis to assist the organization to meet its strategic goals.
- Value driven digitization and automation of business processes and documentation.
- Continuous fostering of Key Stakeholder relationships including customers, 3rd party contractors, vendors and key industry partners.

Corporate Communications and Customer Service/Engagement

The Communications department at Burlington Hydro manages the company's brand and public relations, fostering trust and engagement among customers, stakeholders, and the community. BHI closely monitors and strives to deliver on the following communication priorities:

- Bring together various elements/touch points the company makes with its customers/stakeholders and ensure a consistent 'value proposition' message.
- Engender trust and confidence across all stakeholder and customer audiences, by instilling the integral role we play in the growth and prosperity of our community. A reimagined engagement approach will ensure proactive communication, marketing and responsiveness to evolving customer and stakeholder needs and expectations.
- Extol the virtues of the value of electricity in our everyday lives – at home, at work and at play.
- Engage all classes of customers and provide practical examples and success stories of how we deliver value back to our customer, and through to the community.

The Customer Service team serves as the frontline and first impression for Burlington Hydro, ensuring reliable and responsive service across all customer interactions. In 2023, Customer Service received 43,732 calls and 14,770 emails underscoring its essential role in delivering high-quality support and fostering positive customer relationships.

Burlington Hydro's commitment to customer satisfaction is reflected in its proactive approach to addressing customer inquiries, providing program information, and assisting with account management. In 2023, BHI achieved a 90% overall customer satisfaction rating in its annual Customer Satisfaction Survey, conducted each fall. In 2025, our focus will be to enhance customer service framework and processes in order to provide exceptional customer service across the organization, ensuring customers feel informed and supported.



Strategic Framework

Industry Trends and Regulatory Landscape

The Ministry of Energy and Electrification (MoE&E) has outlined a clear vision for the energy transition in Ontario, emphasizing the need to leverage the province's clean energy grid to drive electrification and job creation, while continuously improving reliability, resiliency, and customer choice. As the economy decarbonizes, electricity demand is expected to grow significantly. In addition to the energy transition, other key trends and factors shaping the business environment include:

- **Net Zero Economy (Energy Transition and Electrification):** Canada has an economy-wide goal by 2050, and net zero electricity system and EV adoption by 2035 requires significant changes, including investments in green technologies and infrastructure. Ontario's transition toward a low-carbon economy is driving significant changes in energy demand and has catalyzed a movement towards grid modernization, EV adoption, and DERintegration.
- **Climate Change** – the impetus for energy transition is climate risk. Increased weather events are increasing in frequency and magnitude. The City of Burlington has created a Climate Action Plan and expects to be net zero by 2050, in alignment with Canada's economy wide goal. BHI must prepare to support and enable these goals in addition to incorporating the necessary system capacity.
- **Growth:** The Independent Electricity System Operator (IESO) forecasts that electricity demand will increase by 75 percent by 2050. This growth will be driven primarily by economic growth, continued increases in Ontario's population, mining and steel industry electrification, and through Ontario's success in attracting unprecedented investment in Ontario's industrial base, including the electric vehicle supply chain. Housing and employment growth, including Ontario's plan to build 1.5 million homes and Burlington's 29,000 new units by 2031, all of which is primarily vertical builds, will significantly impact electricity demand, infrastructure capacity, and customer service needs.

The MoE&E plans to introduce legislation that, if passed, will support the construction of new homes and businesses by making it easier and more affordable to make the "last mile" connections. Changes, identified in the Ontario Energy Board's (OEB) *Report Back to the Minister on System Expansion for Housing Development*, include extending the revenue horizon for connecting residential developments from 25 years up to 40 years and establishing a new Capacity Allocation Model that considers multi-customer, multi-year projects. While promoting growth, these changes could increase the upfront amount that distributors pay towards expansion projects.

- **Digitalization, New Technologies and Cyber Security:** There is a need for rapid advancement of technology to meet new customer and employee demands. Adding significantly more Distribution Energy Resources that will integrate into BHI's infrastructure while at the same time AI accelerating digitalization, will introduce increased cyber risk.

- **Change in Customer Preferences:** Customer preferences are shifting towards faster, digital services, such as EV connections, real-time billing options, and energy efficiency solutions. Residential customers expect faster connections for EVs and digital services. Commercial customers want more energy options to improve efficiencies and meet their own sustainability goals.
- **Competitive Labour Market:** The electricity sector faces challenges in attracting and retaining talent. With an aging workforce and expected growth in the sector, the Electricity Human Resources Canada (EHRC) predicts the need for 28,000 new employees by 2030, a 25% workforce increase. Investments in talent development through upskilling and extending IT capabilities are critical for sustaining future growth.
- **Shifting Regulatory Requirements:** The Ontario electrical industry is heavily regulated, and consists of several agencies and companies including: the government, namely the MoE&E, who sets overall policy for the energy sector regulators such as the OEB, who regulates the rates, activities and defines performance standards of Ontario's LDCs; and the Independent Electrical System Operator (IESO) who manages the power system in real-time, plans for the province's future energy needs and enables conservation. Some of the pertinent regulations and vision papers that are impacting our industry and BHI are highlighted below.

In October 2024, the MoE&E released *Ontario's Affordable Energy Future: The Pressing Case for More Power*, outlining a vision for a clean, reliable, and affordable energy system to support Ontario's growth. The 2025 integrated energy plan will focus on grid modernization, resilience, energy efficiency, and consumer engagement. [Read this vision paper here.](#)

The OEB is tasked with implementing the MoE&E direction to review electricity infrastructure costs and enhance the electricity distribution system. Priorities include supporting housing, transportation, and job creation through system expansion and facilitating innovation in DERs and local energy programs.

The OEB's ongoing focus on **Distribution Sector Resiliency, Responsiveness, and Cost Efficiency** includes incorporating climate resilience into investment planning, ensuring that systems can handle increased severe weather events, and enhancing communication strategies during outages. In relation to this, the OEB launched its **Vulnerability Assessment and System Hardening (VASH)** project in June 2024 which may result in new directives to distributors, and methodologies to contemplate and test vulnerability, resilience and storm hardening.

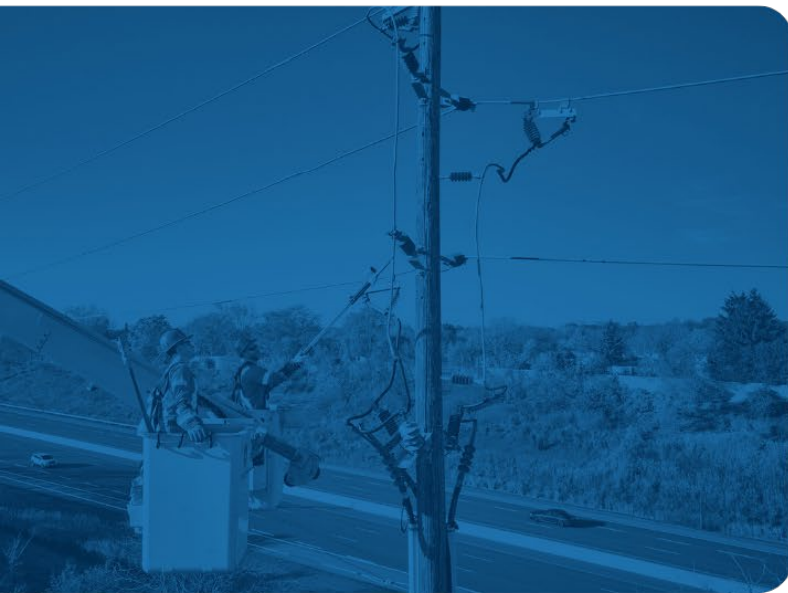
The OEB has launched a study to assess the need, value, functionalities, opportunities, risks, incumbent and sector roles, and impact of potential **Distribution System Operator (DSO)** models for Ontario. A DSO is an entity with advanced capabilities to integrate, manage and optimize DERs for distribution and transmission services.

The OEB is undertaking a generic proceeding to consider the methodology for determining the values of the **Cost of Capital Parameters** (debt rates and return on equity) and deemed capital

structure to be used to set rates, the results of which could affect the rates that BHI is permitted to charge its customers in 2026 and beyond.

The OEB is conducting a consultation to advance its **Performance-based Approach to Rate Regulation**. The objective of this initiative is to develop ways to strengthen the link between what electricity distributors earn and the achievement of outcomes consumers value, such as cost-effectiveness, reliability and customer service. The OEB will be focused on assessing the cost effectiveness of remunerating utilities based on traditional capital infrastructure deployment.

IESO Market Renewal Program (MRP) – In addition to the Pathways to Decarbonization paper issued in 2022, the IESO is implementing its Market Renewal Program (MRP), expected to go live May 1, 2025. This initiative will improve the way electricity is supplied, scheduled, and priced by introducing a day-ahead market, enhanced unit commitment, and locational pricing. These changes are intended to make the electricity market more efficient and integrate emerging technologies like DERs, storage, and hybrids.



Energizing Partnerships

GridSmartCity Cooperative



The GridSmartCity Cooperative's (GSCC) 16-member LDCs pursue efficiencies and service improvements, the same as incorporated companies, but with the advantage of pooling member knowledge and resources. The structure of the Cooperative is ideally suited to help Burlington Hydro and member LDCs adapt, prepare, and build by:

- Pursuing contracts that further cost savings/cost avoidance for LDC partners
- Championing innovation by pursuing emerging technologies
- Balancing distributed energy resource benefits with implementation complexity and cost
- Protecting and improving electricity reliability through the convergence of electric vehicles
- Helping deal with the broadening cyber security landscape
- Continuing to be a strong forum for collaboration and best practice sharing

BHI is working with GSCC for third party, supply chain and vendor risk management as part of the requirements of the Ontario Cyber Security Framework (OCSF). This engagement is focused on areas related to information system controls effectiveness, cyber threat intelligence, asset vulnerabilities, incident response plans and overall security posture assessment as part of third party and supply chain risk evaluation.

In addition, GSCC has commissioned two studies to assist partners with future technology changes:

1. A study to determine the technological, operational and financial requirements to implement a DSO model.
2. A Next Generation Metering Strategy Scoping exercise as next-generation smart meters are pivotal for the grid's evolution, offering enhanced data capabilities that enable grid-edge enablement. These meters empower utilities to monitor and manage energy flows at the network's edge in real-time, optimizing grid operations and enhancing reliability.

Electricity Distributors Association (EDA)



The Electricity Distributors Association (EDA) is the voice of Ontario's LDCs, advocating for policy and regulatory outcomes that support the needs of the province's electricity customers and utility sector. Through its work, the EDA provides BHI with valuable resources, industry insights, and a platform for influencing policies that shape Ontario's energy future. The association offers services such as regulatory guidance, industry representation, and the opportunity to share knowledge and best practices across its membership.

The EDA's recent [Vision Paper: Solving Grid-Lock](#) underscores the pivotal role of LDCs in supporting Ontario's energy transition, highlighting several key priorities:

- Promoting a shared vision for electrification to support Ontario's clean energy goals
- Investing in grid infrastructure to enhance readiness for increased electrification demands
- Advancing policy frameworks that empower utilities to deliver reliable and efficient services
- Focusing on grid modernization and resilience to minimize energy costs for customers, boost economic competitiveness, and ensure long-term sustainability

SWOT



Please see Appendix B for a more comprehensive SWOT analysis.

Objectives

Burlington Hydro’s strategic objectives focus on delivering reliable service, operational excellence, and financial stability while fostering a positive workforce and adapting to the evolving needs of our customers.



2025/2026 Priorities

FINANCIAL STEWARDSHIP	INTERNAL PROCESSES AND OPERATIONAL EXCELLENCE	CUSTOMER AND COMMUNITY	LEARNING AND GROWTH
1.1 Responsible Financial Management: Optimize distribution rates and costs and mitigate financial risks while making prudent investments in technology, infrastructure, and operations.	2.1 Reliability & Resilience: Ensure safe, resilient, and reliable electricity distribution through proactive system maintenance and climate resilience initiatives.	3.1 Customer Service: Enhance customer service framework and processes to provide exceptional customer service across the organization, ensuring customers feel informed and supported.	4.1 Workforce Planning & Development: Optimize organizational structure, enhance succession planning, and provide ongoing training and development opportunities to ensure long-term talent sustainability and readiness.
1.2 Efficiencies: Find continued efficiencies and cost savings that deliver value to customers and shareholders.	2.2 Efficiencies & Digitalization: Enhance operational efficiency by leveraging digital tools to improve processes, automate tasks, and reduce costs.	3.2 Customer Satisfaction & Engagement: Enhance customer and stakeholder engagement and engage with customers regularly to gather feedback and improve services, ensuring their needs are met and their experience is positive.	4.2 Employee Engagement & Culture: Foster a positive, inclusive, and collaborative work environment that actively engages employees, promotes well-being, and aligns with company values.
1.3 Capital Planning: Develop and implement financial strategies to support capital investments in infrastructure, electrification, and growth.	2.3 Electrification and Growth Drive sustainable growth and support electrification by upgrading infrastructure and planning for increased growth and demand.	3.3 Public Safety: Strengthen public safety awareness through education, outreach, and proactive communication.	4.3 Adaptation to Innovation: Continue to adapt and integrate emerging skills and technologies such as data analytics and system integrations that enhance operations.
1.4 Regulatory Compliance: Ensure compliance with regulations and accounting standards to support long-term financial stability and ensure operational and financial integrity.	2.4 Governance & Risk Management: Continue to enhance governance and risk management programs, including strengthening cybersecurity measures.	3.4 Communications & Branding: Strengthen the company's brand and reputation through strategic communications, public relations efforts, and community engagement initiatives.	4.4 Health & Safety: Promote a strong safety, wellness and inclusivity culture by providing comprehensive safety training and encouraging employee involvement in health, safety, and wellness initiatives.

See Appendix C for expanded action plans.

Risk and Mitigation

BHI employs Enterprise Risk Management (ERM) to monitor and assess risk in eight broad categories as identified below. A risk matrix, updated and reported quarterly to the BHI Board, is used as a tool to assess risk by defining ranges for risk appetite, risk probability and impact scores.

- Operational
- Financial
- Profitability
- Reputational
- Compliance
- Regulatory
- Technology
- Strategic

Once identified, the business is managed to avoid risks that:

- Negatively affect the quality of service;
- Negatively affect the health and safety of employees and the public;
- Negatively affect the reputation of the corporation and its shareholder;
- Negatively affect the financial integrity of the corporation;
- Lead to laws, codes or regulations being breached; or
- Endanger the future viability or existence of the corporation.

The most significant risks currently facing BHI are:

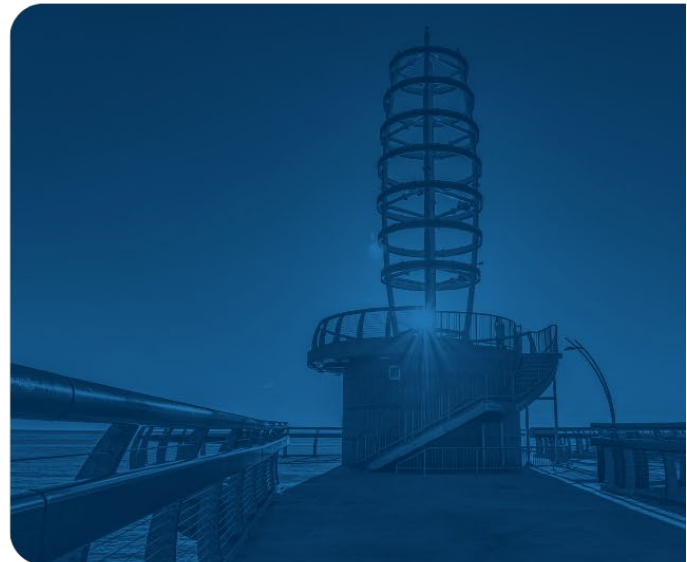
- **Service Disruption:** The increased incidence of extreme weather events, unexpected equipment failures and supply chain challenges (pricing increases, longer lead times, limited supply) have the potential to disrupt service for longer durations and to be more frequent.
- **Employee Retention:** All LDCs including BHI are facing retention and resourcing challenges as a result of an aging workforce, a low unemployment rate and high demand for skilled labour.
- **Regulatory, Environmental and Technological Change:**
 - Net-zero goals and the transition to a more dynamic and dispersed energy network through decarbonization (including electrification), digitization, decentralization and democratization;
 - Responding to increased demand in the City of Burlington due to electrification and population growth;
 - Regulatory and policy changes mandated by the OEB, the MoE&E and others are frequent and can put a strain on resources;
 - Many companies are challenged to keep up with the latest technology platforms and their related application solutions;

- **Cyber Security:** Cyber Security risk management continues to be a top corporate priority with a focus on technology and business operations. With the evolving threat landscape and increasing risk to security of grid as part of critical infrastructure, Risk Management, Cyber Security, Privacy and Information Governance have become paramount components for business sustainability.
- **Health and Safety:** Our employees are exposed to high-voltage equipment, challenging physical environments, and extreme weather conditions, all of which creates risk of accidents and injuries. Due to the inherently hazardous nature of electrical work and infrastructure management that BHI operates within, the above elements could pose additional risk. In addition to protecting our workforce, we must also ensure the safety of the public by preventing incidents such as downed powerlines and electrical contact associated with our infrastructure.

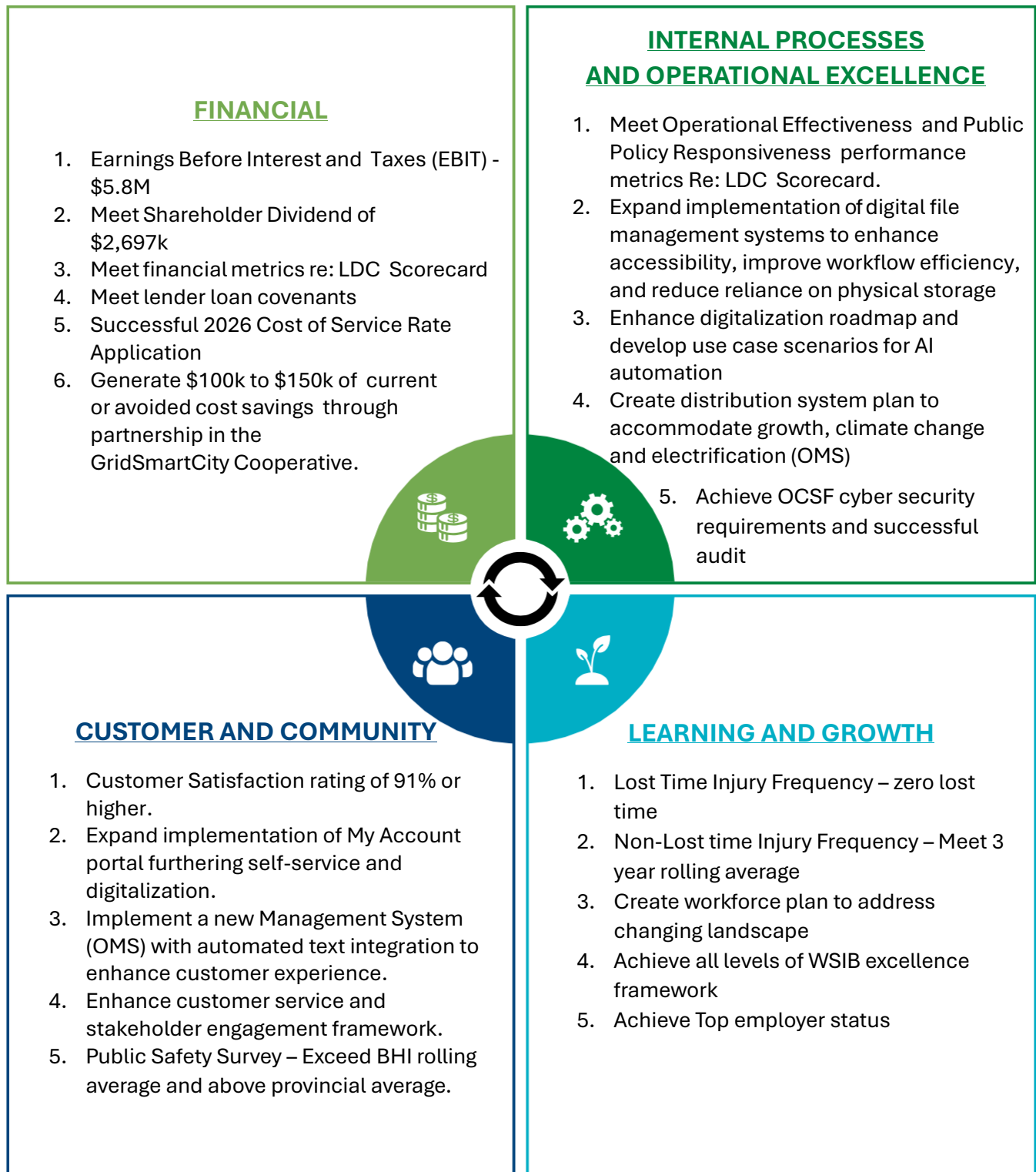
BHI addresses the mitigation and impact of these risks in its ongoing enterprise risk management framework. Mitigation strategies associated with the most significant risks include:

- **Service Disruption:** Power interruptions and reliability statistics are tracked and monitored by the System Control Supervisor; Min/Max inventory levels, vendor performance and impacts of major weather events across North America to Supply Chain are monitored by the Supply Chain Manager. Access to additional labor resources is available through the “Ontario Mutual Assistance Group” and agreements with contractors.
- **Employee Retention:** Employee satisfaction survey actions items are in place. Regular compensation surveys are conducted to ensure competitiveness. Focus on creating a sense of belonging and adopting best inclusivity practices are maintained to assist with employee retention/attraction.
- **Regulatory, Environmental and Technological Change:**
 - Maintain partnerships and a strong presence on all EDA Councils. This includes daily monitoring and participation across all facets of business.
 - Actively monitor, assess and implement revisions to policy, regulations and standards. Via GridSmartCity, use pilot projects to introduce potentially disruptive technologies to the grid. Pursue new business opportunities that result.
- **Cyber Security:**
 - Cultivating an environment of proactive risk management for information security, empowering our organization to operate securely in evolving threat landscape.
 - Aiming to protect Confidentiality, Integrity and Availability of organization Assets and Information by employing a defense in depth strategy.
 - Continuous compliance with OCSF in areas of Business Governance, Risk Management, Compliance, Privacy and Security Engineering.
 - Participating in Industry initiatives to protect organization systems and liaison with IESO, CCCS, Cyber Insurance Providers and Third-Party Auditors.
 - Ensuring compliance with standards related to Privacy controls through security frameworks.

- Implementing information systems controls to protect end to end enterprise processes, including supply chain, third party risk assessment, contractors and vendors by adopting Security Engineering methodologies.
- **Health and Safety:**
 - Continually enhance and implement BHI's comprehensive training program which includes safety protocols, emergency response, working at heights, and with high-voltage equipment.
 - Ensuring all employees have access to appropriate personal protection equipment. Conduct regular audits and inspections of work sites, vehicles and equipment to identify hazards and ensure a culture of continuous improvement.
 - Educate the public about electrical hazards, through public safety awareness programs.



Evaluation and Metrics – Balanced Scorecard



Refer to Appendix D for the OEB's LDC Scorecard annual performance metrics

Appendices

A. Glossary of Terms

AFI	Advanced Metering Infrastructure	MRP	Market Renewal Program
BEC	Burlington Enterprises Corp.	NRCan	Natural Resources Canada
BESI	Burlington Electricity Services	OEB	Ontario Energy Board
BHEI	Burlington Hydro Electric Inc.	OESP	Ontario Electricity Support Program
BHI	Burlington Hydro Inc.	OCSF	Ontario Cyber Security Framework
CDM	Conservation and Demand Management	OMS	Outage Management System
COS	Cost of Service	OM&A	Operations, Maintenance and Administration
CIS	Customer Information System	OPA	Ontario Power Authority
CPI	Consumer Price Index	ROE	Return on Equity
DER	Distributed Energy Resources	SAIDI	System Average Interruption Duration Index
DSO	Distribution System Operator	SAIFI	System Average Interruption Frequency Index
DSP	Distribution System Plan	SCADA	Supervisory Control and Data Acquisition
EBIT	Earnings Before Interest and Taxes	SQL	Service Quality Indicator
EDA	Electricity Distributors Association	TS	Transformer Station
EHRC	Electricity Human Resources Canada	WSIB	Workplace Safety and Insurance Board
ERM	Enterprise Risk Management		
ESA	Electrical Safety Authority		
EVs	Electric Vehicles		
GIS	Geographic Information System		
GSCC	GridSmartCity Cooperative		
HEC	Hydro-Electric Commission		
HR	Human Resources		
HSEMS	Health, Safety, and Environment Management Systems		
HVAC	Heating, Ventilation and Air Conditioning		
H&S	Health and Safety		
IESO	Independent Electricity System Operator		
IFRS	International Financial Reporting Standard		
IRM	Incentive Regulation Mechanism		
IT	Information Technology		
kW	Kilowatt (measure of demand)		
kWh	Kilowatt Hour (measure of consumption)		
LDC	Local Distribution Company		
MoE&E	Ministry of Energy and Electrification		

B. Comprehensive SWOT Analysis

Strengths:

Reliable and Robust Distribution System: Has a strong track record of providing a reliable electricity supply to its customers. The company has a well-developed infrastructure incorporating some modern equipment and technology. It can accommodate the City's aggressive growth plans and has adequate supply until 2035.

Strong Brand and Local Presence: The brand is highly recognized in industry and the community. It is viewed as a community supporter and is respected and trusted by all stakeholders and has the leverage to secure key partnerships.

Customer Centric Approach: Has consistently maintained an excellent customer service record and prioritizes the customer in its approach to operations.

Customer Base: Serves a diverse and stable customer base. Exposure to economic downturn is limited as a result.

Financial Stability: Has a stable financial position, allowing for future investments and expansion.

Organizational Structure and Compliance: The company has a long history of operating in the City of Burlington and as a result has a well-developed structure and consistently overachieves regulatory and compliance obligations which provides for stability and predictability.

Employer of Choice and Skilled Workforce: The company is situated in an area that can and has attracted a highly skilled workforce from the top down. It has an employee-centric approach and is well known for its safety-first culture and excellent safety record. It is recognized as a Top Employer.

Weaknesses:

Aging Infrastructure: Its infrastructure is aging at a faster rate than replacement, requiring significant investment in upgrades and leading to potential maintenance issues and unexpected costs.

Limited Scale and Geographic Presence: The size of the company is considered medium, and it does not have the same economies of scale as a larger utility which can limit growth, investment, and productivity savings. Its operations are limited to a specific geographic area, limiting growth opportunities.

Workforce Renewal, Engagement and Upskilling Required: The workforce has changed over at a significant rate which has caused a loss of knowledge of processes. The energy transition will require a significant change to workforce structure and skills required to adapt.

Limited Innovation: The company has some legacy IT/OT/IOT infrastructure along with a historical siloed approach to investing and maintaining its technologies. This can lead to missed opportunities to reduce costs and adapt to changing customer and employee preferences.

Opportunities:

The Energy Transition, Electrification and Renewable Energy: There is an opportunity to invest in renewable energy sources and contribute to the transformation of the Industry and Community such as solar, EV charging, storage, and electric heating. While at the same time, be viewed as an enabler for customers and partners to meet their sustainability goals and regulatory requirements.

Infrastructure and Grid Modernization: Integrating new technologies and distributed energy resources into the distribution system can enhance efficiency, reliability, resiliency, and growth opportunities.

Electric Vehicle Infrastructure: With the growth of electric vehicles, there is an opportunity to invest in charging infrastructure and services pending changes in regulations.

Systems, Data Analytics and AI: Modernizing systems, and investing in data analytics and AI will enable BHI to improve operations such as customer service and offerings, facilitate energy usage analysis, optimize asset management, and effectively manage or prevent outages.

Threats:

Regulatory Changes and Uncertainty: The company operates in a highly regulated environment as such changes in government and regulatory policies and regulations could impact operational improvements and rate of return.

Cybersecurity Risks: The company is vulnerable to cybersecurity threats, which can disrupt operations and erode customer trust. Growing digitization and system adoption, shadow IT/OT/IOT infrastructure and/or lack of investment in IT resources can increase the risk of damage to operations.

Climate Change and Natural Disasters: Climate change is having an impact on the frequency of events such as extreme weather and storms. As such, can damage infrastructure and disrupt service delivery.

Competitive Labour Market: The aging workforce has caused a shortage of skills which could impact on our ability to attract and retain employees. The post pandemic has had a major shift in employee preferences to work environment and compensation packages.

C. 2025 Action Plans

1. Financial Stewardship

1.1 Responsible Financial Management

1. Monitor and measure BHI performance against goals and industry benchmarks.
2. Monitor and leverage IESO/OEB policies, funding models and funding availability. Secure additional funding through lenders as required.
3. Ensure Board Members and Senior Staff are well apprised of financial risks/opportunities tied to organizational threats and weaknesses.

1.2 Efficiencies

1. Grow the shared services model with GridSmartCity LDC members to collectively procure or deliver services and materials more cost efficiently. This will include services/resources with respect to: benefits; inventory (poles, wire/cable, transformers); fleet outsourcing; service outsourcing; etc.

1.3 Capital Planning

1. Develop plans to fund growth driven by housing, development and electrification.
2. Maintain optimal Asset Management plans.

1.4 Regulatory Compliance

1. Leverage lessons learned from recent Cost of Service application and refine processes to optimize for 2026-2030 Cost of Service application.
2. File and defend the 2026 Cost of Service rate application.

2. Internal Processes and Operational Excellence

2.1 Reliability & Resilience

1. Implement proactive maintenance strategies to protect against extreme weather events.
2. Maintain current release levels on Application Systems to ensure maximum functionality, reliable support and return on investment of Annual Maintenance.
3. Support implementation of the City of Burlington's Climate Action Plan and the Climate Change Adaptation Plan.

2.2 Efficiencies & Digitalization

1. Implement standardized and automated business processes for productivity improvements and better outcomes.
2. Centralize supplies and optimize facility space.
3. Investigate improved warehouse management workflows and space optimization along with enhanced yard security and outside storage materials management workflows.
4. Use Contractor Compliance to manage Contractors and deliver their H&S Orientation.
5. Successfully integrate and implement an OMS for the Operations and Engineering departments to manage projects and outages effectively.
6. Integrate and optimize digital file management systems to enhance document accessibility, improve workflow efficiency, and reduce reliance on physical storage.

2.3 Electrification & Growth

1. Prepare local grid for higher demand.
2. Replace and upgrade infrastructure to meet growing demand and support electrification.

2.4 Governance & Risk Management

1. Continuous Improvement and adaptation of BHI's Cyber Security Management Program in response to changing Threat Landscape.

3. Customer and Community

3.1 Customer Service

1. Implement a customer service Strategic Plan to instill a customer service culture across the entire organization.
2. Ensure customers are well informed of operating measures – from our commitment to keep the lights on, to programs and payment options available to help those struggling to pay their electricity bill.

3.2 Customer Satisfaction and Engagement

1. Conduct annual customer satisfaction surveys and implement key recommendations within our control.
2. Establish a comprehensive plan to improve customer engagement with targeted programs and initiatives that align with customer needs and preferences.
3. Introduce an automated alert system to notify customers of planned and unplanned outages via SMS, email, and website updates, improving transparency and customer satisfaction during outages.

3.3 Public Safety

1. Implement an ongoing public safety campaign in response to ESA Safety Survey.
2. Partner with ESA and other LDCs on a refreshed Public Safety campaign and an enhanced Safe Schools program.

3.4 Communications & Branding

1. Ensure customer understanding of BHI Value Proposition to community.
2. Build on communications strategy to include:
 - Profiles of successes and cost-effective electricity distribution
 - GridSmartCity and BHI Brand Building
 - Promotion of BHI as a “Great Place to Work,” “Employer of Choice,” and “Safe Employer”
3. Engage Staff to conduct a brand refresh that includes organizational purpose and identity. Create an implementation and execution plan.

4. Learning and Growth (Employer of Choice)

4.1 Workforce Planning & Development

1. Enhance Staff Training and Development Plan to ensure upskilling and extension of IT capabilities to address changing landscape.
2. Implement functional staff cross-training and improve process documentation to improve capability redundancy among staff.
3. Conduct a workforce planning strategy to ensure effective attraction and retention.
4. Further enhance recruitment strategies to ensure inclusivity.
5. Ensure succession plans are in place for key positions.

4.2 Employee Engagement & Culture

1. Continue to reinvigorate relationships that will promote desired culture.

4.3 Adaptation to Innovation

1. Develop personnel capabilities to accommodate diverse technologies in support of net-zero goals.

4.4 Health & Safety

1. Take steps to participate in a recognized new Safety Management System that promotes health and safety excellence and takes us beyond WSIB Safety Excellence program.
2. Meet safety metric of the OEB Scorecard.
3. Utilize the training matrix by position within SafeTapp to ensure employees are up-to-date on safety requirements.

D. LDC Scorecard

Burlington Hydro has a business culture that promotes continuous adjustment and improvement to ensure it delivers value in the services it provides to its customers.

The Ontario Energy Board's LDC Scorecard reports annual performance metrics for each electricity utility in Ontario, including Burlington Hydro. The scorecards are a way to track performance year over year and compare to other utilities' performance. The scorecard provides data for specific measures in the following four key areas of performance:

- Customer focus
- Operational effectiveness
- Public policy and responsiveness
- Financial performance

The OEB uses scorecards to help monitor an individual utility's performance and to compare performance across the sector. Comparisons are critical to its rate-setting process, and through them, it can determine if corrective action is need.

Review the 2023 Scorecard:

https://www.burlingtonhydro.com/images/pdfs/2023_Scorecard_MDA_BHI_Final.pdf



Part B

Pro Forma & Financial Statements



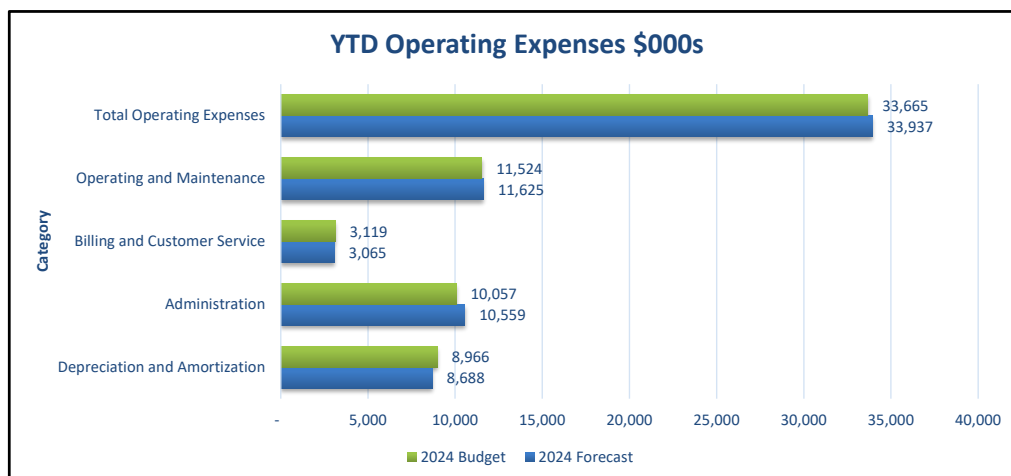
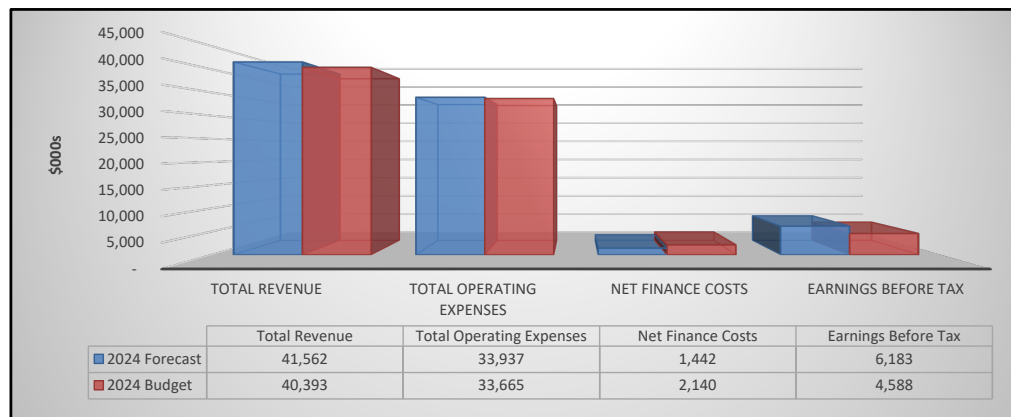


2024 Forecast

Pro Forma Financial Statements



OPERATING PERFORMANCE DASHBOARD - 2024 FORECAST



EARNINGS BEFORE INTEREST AND TAX

\$7.62M

\$6.73M

113%

2024 Forecast

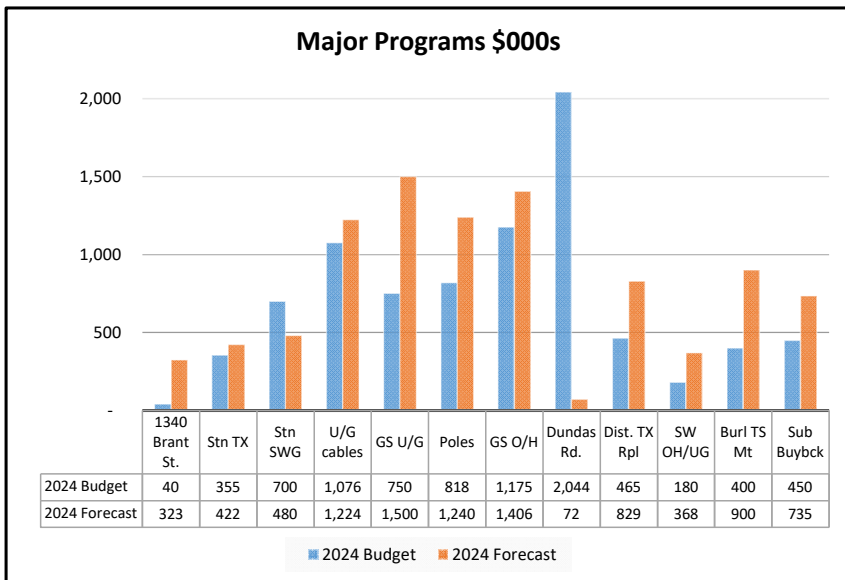
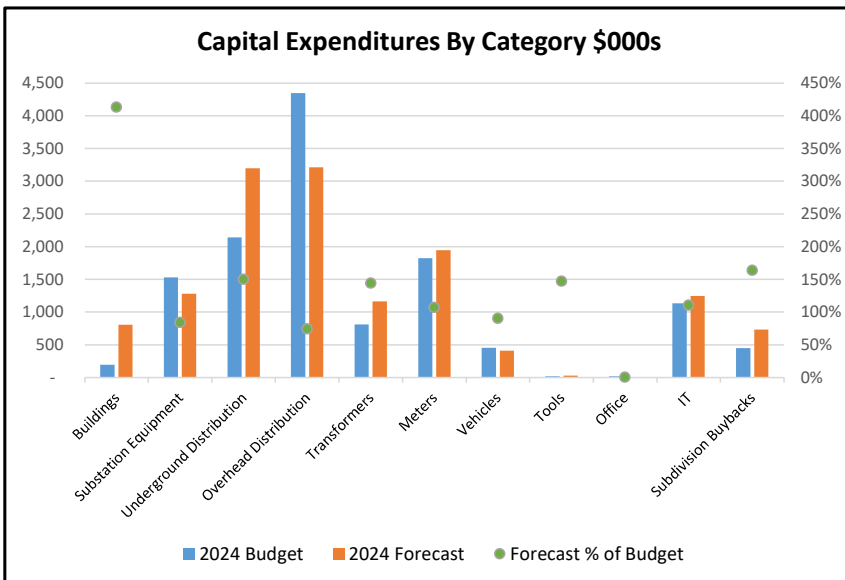
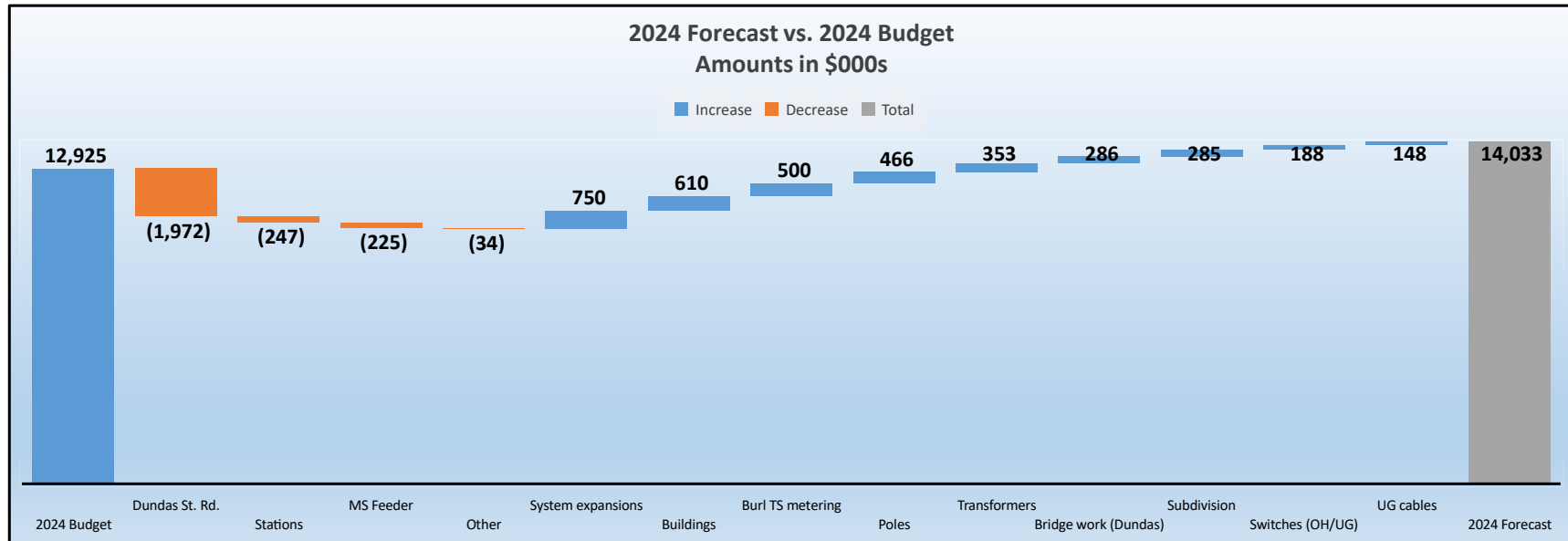
2024 Budget

% of Budget

\$000's	2024 Forecast	2024 Budget	F/(U)	% Budget
DISTRIBUTION REVENUE	37,106	36,820	287	101%
OTHER OPERATING REVENUE	2,858	1,764	1,094	162%
DEFERRED REVENUE	1,598	1,810	(212)	88%
TOTAL REVENUE	41,562	40,393	1,169	103%
O&M	11,625	11,524	(101)	101%
B&CS	3,065	3,119	54	98%
ADMIN INCL PROPERTY TAX	10,559	10,057	(502)	105%
TOTAL OPERATING EXP	25,249	24,700	(549)	102%
DEPRECIATION	8,688	8,966	277	97%
EBIT	7,625	6,728	897	113%
NET FINANCE COSTS	1,442	2,140	698	67%
NET INCOME BEFORE TAX	6,183	4,588	1,595	135%
TOTAL TAXES	711	528	(183)	135%
NET INCOME AFTER TAX	5,472	4,060	1,412	135%



CAPITAL EXPENDITURES DASHBOARD - 2024 FORECAST



2024 Forecast

MANAGEMENT DISCUSSION & ANALYSIS (MD&A)

Earnings Before Tax (EBT)

- EBT of **\$6,183k** is expected to be **\$1,595k or 135%** favorable vs. the budget of \$4,588k primarily due to:
 - o favorable other operating revenue of **\$882k** (including deferred revenue) primarily driven by:
 - management fees billed for the Metrolinx GO Corridor Electrification and Burloak Grade Separation projects of \$752k which attract fees for BHI's management costs; and
 - interest on regulatory balances of \$278k; offset by
 - lower depreciation on projects funded through contributed capital \$(212)k
 - o favorable net finance costs of **\$698k** driven by higher cash balances and lower interest on long term debt (the budget anticipated drawing down the remaining \$10M TD term loan. This was originally required to be drawn down to 2023 and can be extended as late as 2026);
 - o favorable distribution revenue **\$287k**
 - o favorable depreciation expense **\$277k** due to lower capital expenditures than budgeted partly offset by:
 - o unfavorable operating expenses of **\$(549)k**

Distribution Revenue

- Distribution Revenue of **\$37,106k** is expected to be **\$287k** favorable vs. the budget of \$36,820k due to a higher number of residential customers and higher consumption/demand for commercial customers than budgeted.

Operating Expenses

- Operations & Maintenance (Control Room /Stations /Meter Shop/ Distribution (Lines)) costs are forecast to be unfavorable vs. budget by **\$(101)k** due to:
 - o Scadamate Switch Maintenance (\$175k) which was unplanned and not conducted on a proactive basis in the past. High failure rates of these units in 2023 and 2024 warranted completing maintenance on all units and implementing a proactive maintenance program on a 5-year cycle
 - o Locates (\$75k) due to higher locate requests as compared to budget
 - o Vegetation Management (\$55k) due to increased storm activity; partly offset by
 - o Wages which are favorable as compared to budget driven by (i) vacancies and partly offset by (ii) a higher percentage of labour allocated to operating activities for station maintenance
- Billing & Collecting (Billing Department, Call Centre, Meter Reading) costs are forecast to be **\$54k** favorable vs. budget due to:
 - o postage and stationery favorability and vacancies.
- Administration Department (Executive, Human Resources, IT, Purchasing, Regulatory, Safety, Communications, Accounting, Board of Directors) costs are forecast to be unfavorable vs. budget by **\$(502)k** due to:
 - o (\$183k) salaries and benefits higher than budgeted due to the hiring of support staff - an executive assistant and temporary staff in HR;
 - o (\$82k) hosting services and software support for BHI's CIS and imaging/workflow software for accounts payable
 - o (\$76k) due to higher costs allocated to LDCs by the OEB; and increased costs associated with filing the 2026 Cost of Service rate application
 - o (\$58k) legal fees associated with collective bargaining and settlements

Capital Expenditures

BHI - 2024 FORECAST CAPITAL EXPENDITURES	2024 FORECAST	2024 BUDGET	VARIANCE	
			\$ Incr/(Decr)	% Fcst
GROSS CAPITAL	29,714	29,299	415	101 %
CONTRIBUTED CAPITAL	(15,682)	(16,374)	692	96 %
NET CAPITAL	14,033	12,925	1,107	109 %
BUILDINGS	805	195	610	413 %
SUBSTATION EQUIPMENT	1,283	1,530	(247)	84 %
U/G PROJECTS	3,199	2,141	1,059	149 %
O/H PROJECTS	3,212	4,345	(1,133)	74 %
TRANSFORMERS	1,164	811	353	144 %
METERS	1,946	1,826	120	107 %
ROLLING STOCK	410	455	(45)	90 %
TOOLS	29	20	9	147 %
COMPUTER HARDWARE/SOFTWARE	1,248	1,132	116	110 %
OFFICE EQUIPMENT	—	20	(20)	— %
SUB TOTAL	13,298	12,475	822	107 %
DEVELOPER BUYBACKS	735	450	285	163 %
TOTAL CAPITAL EXPENDITURES	14,033	12,925	1,107	109 %

- **Net Capital Expenditures** are forecast to be **\$1,107k** higher than the 2024 budget driven by:
 - o Buildings \$610k - Replacement of a section of the roof at 1340 Brant Street that is beyond economic repair, replacement/refurbishment of the receiving dock, and construction of a retaining wall in the yard;
 - o U/G Projects \$1,059k – Higher expenditures on i) system expansion projects, ii) U/G cables to address faults, and iii) duct hanger inserts at the Dundas Street bridge crossing, partially offset by cancellation of the MS Feeder cable replacement project;
 - o Transformers \$353k - Increased expenditures to replace leaking/faulty transformers;
 - o Meters \$120k - Higher expenditures on the Burlington TS metering replacement, partially offset by lower spending on electricity suite metering;
 - o Computer Hardware/Software - Higher expenditures to replace end-of-life network switches and for ERP enhancements/upgrades;
 - o Developer buybacks \$285k - Increased expenditures to buy back subdivision assets from developers;

partly offset by the following decreases:

- o Substation Equipment \$(247)k –The installation of additional 2 Switchgear units was cancelled; and
- o O/H projects \$(1,133)k – the Dundas Road widening project was delayed until 2025.
- **Contributed Capital** is forecast to be \$692k lower than the 2024 budget driven by:
 - o \$2,966k Delayed Dundas Rd Widening project until 2025;
 - o \$516k Revised estimate for the Burloak Grade Separation project;

partly offset by the following increases:

- \$(2,070)k - higher cost recovery for Phases 1.1 and 9.1 of the Metrolinx corridor electrification project due to an increase in project completion estimates; and
- \$(728)k - higher demand for General Service U/G projects.

2024 Dividends

BHI - 2024 DIVIDENDS DECLARED TO BEC \$000s		DATE	2024 FORECAST	2024 BUDGET	COMMENTS
Q4 PRIOR YEAR		Mar-2024	184	723	Completed
WORKING CAPITAL BEC		Mar-2024	50	50	Completed
Q1 CURRENT YEAR		Mar-2024	417	417	Completed
Q2 CURRENT YEAR		Jun-2024	417	417	Completed
Q3 CURRENT YEAR		Sep-2024	417	417	Completed
Q4 CURRENT YEAR		Dec-2024	417	417	Proposed
SPECIAL DIVIDEND - CAP STUDY		Sep-2024	58	173	Completed
SPECIAL DIVIDEND - FORESTRY LEASE		Dec-2024	116	115	Proposed
TOTAL			2,076	2,727	

- Regular Dividends are forecast at \$2,076k for 2024, which includes a \$184k true-up payment for 2023 actuals and reflects the new dividend policy.
- Special Dividends are forecast at \$173k as compared to the budget of \$287k which represents:
 - \$58k for BEC for the completion of the Sustainability Plan on behalf of the City of Burlington to support their Climate Action Plan - the project cost was lower than anticipated; and
 - \$116K for the property and trailer lease for the City of Burlington Forestry Group.

2025 Budget and 2026 Forecast

Pro Forma Financial Statements



2025 Budget and 2026 Forecast

ASSUMPTIONS

Regulatory Inputs

- BHI's rates are set under the Price Cap IR (Incentive rate-setting) methodology which is a Cost of Service year typically followed by 4 years adjusted using an inflationary formula
 - BHI filed a Cost of Service application for rates effective May 1, 2021 after six years of inflationary increases
 - 2025 is BHI's fourth Incentive Rate-Setting Mechanism (IRM) application following the 2021 Cost of Service. Under the IRM process, base rates for electricity distributors are adjusted by a mechanism that is based on an OEB inflation factor less a productivity or X-Factor. The formula includes an industry-specific inflation factor and two factors for productivity - one productivity factor is a fixed amount for industry wide productivity and the other is a stretch factor
 - The **OEB inflation factor** is intended to reflect the LDC's growth in input prices and is calculated using 70% of the annual growth in GDP-IP and 30% of the annual growth in Average Weekly Earnings. A 1% change in OEB inflation represents approximately \$380k in distribution revenue.
 - The **productivity factor** for IRM applications is currently set at 0% by the OEB.
 - BHI's **stretch factor** is 0.15% - BHI is in the 2nd cohort group (actual costs are 10-25% lower than predicted costs). A 0.15% change in the stretch factor represents approximately \$55k in distribution revenue.
- The OEB inflation factor for 2025 is 3.60%. BHI's distribution rates will increase by 3.45% effective January 1, 2025 (OEB inflation less BHI's stretch factor of .15%)

Group I SF = 0% 17 LDCs	Group II SF = .15% 15 LDCs	Group III SF = .30% 17 LDCs	Group IV SF = .45% 3 LDCs	Group V SF = .60% 2 LDCs
Cooperative Hydro Embrun E.L.K. Energy Entegrus Powerlines ENWIN Utilities Essex Powerlines Grimsby Power Halton Hills Hydro Hearst Power Distribution Hydro Hawkesbury Lakefront Utilities Milton Hydro Northern Ontario Wires Orangeville Hydro Ottawa River Power Sioux Lookout Hydro Wasaga Welland Hydro	Burlington Hydro Centre Wellington EPCOR Electricity Distribution Fort Frances Power GrandBridge Energy Inc. Hydro 2000 Inc. Kingston Hydro Lakeland Power Distribution Newmarket-Tay Power Niagara-on-the-Lake Niagara Peninsula Energy Oshawa PUC Rideau St. Lawrence Distribution Tillsonburg Hydro Westario Power Inc.	Alectra Utilities Atikokan Hydro Bluewater Power Distribution Chapleau Public Elexicon Energy Enova Power ERTH Power Festival Hydro Greater Sudbury Hydro Innpower London Hydro North Bay Hydro Distribution Oakville Hydro PUC Distribution Renfrew Hydro Synergy North Wellington North Power	Canadian Niagara Power Hydro One Hydro Ottawa	Algoma Toronto Hydro
				Change vs. PY GSC Members

Stretch Factor Assignments by Group

- Stretch factor assignments are based on the results of an OEB statistical cost benchmarking study designed to make inferences on individual distributors' cost efficiency. Distributors that had actual costs that were lower than that predicted by the model are considered to be better cost performers and are assigned lower stretch factors than those that did not.
- Stretch Factors are determined on an annual basis and deducted from inflation to determine an LDC's rate increase in a non-Cost of Service year.

2026 Cost of Service Application

- BHI is scheduled to file its next Cost of Service application in March 2025 for 2026 rates.
 - A Cost of Service application sets a price for a service based on the costs to provide it
 - OEB approves revenue for the year (2026) which is based on the sum of:
 - Rate of Return on Capital Expenditures and Working Capital
 - Operating expenses
 - Depreciation
 - Interest Expense
 - Income Tax
 - Distribution revenue is allocated to rate class based on cost to serve that rate class.
 - Rates to recover that revenue are determined based on estimated customer count and consumption/demand.
 - Revenue for four + subsequent years is based on the Cost of Service year + inflationary increases.

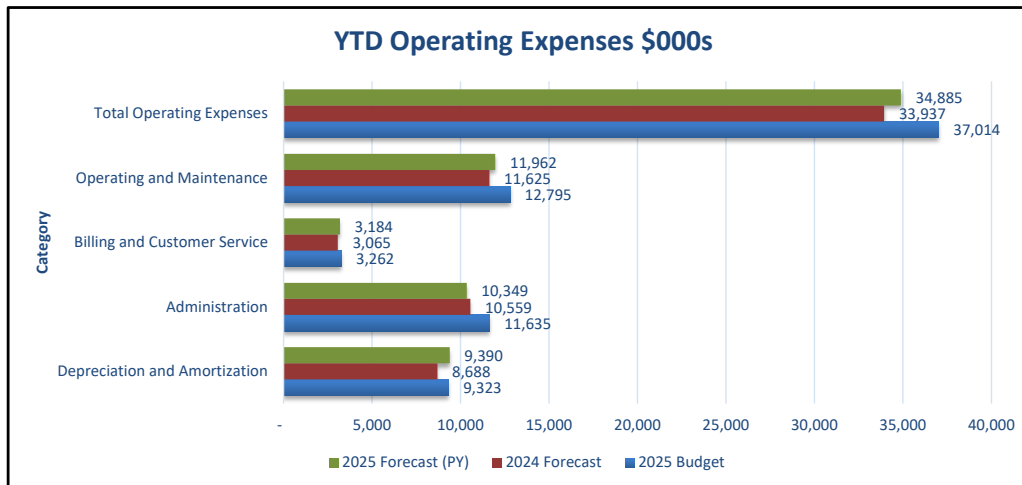
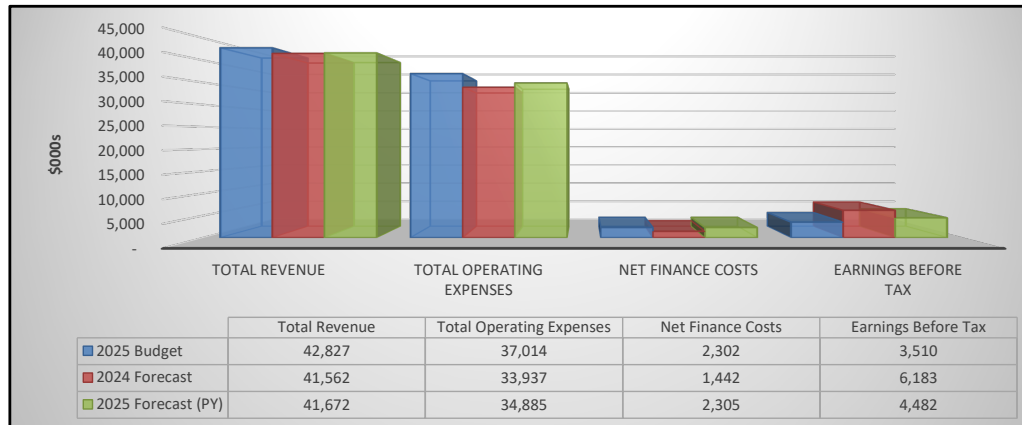
Price Cap IR	Year 1 ¹	Year 2	Year 3	Year 4	Year 5	Year 1 ¹
	May 1 2021	May 1 2022	May 1 2023	May 1 2024	Jan 1 2025	Jan 1 2026
	Cost of Service	IRM	IRM	IRM	IRM	Cost of Service
OEB Inflation		3.30%	3.80%	4.80%	3.60%	
Stretch Factor		0.15%	0.15%	0.15%	0.15%	
% Rate Increase		3.15%	3.65%	4.65%	3.45%	

1. Rates set on Cost of Service Basis

- The OEB sets the Cost of Capital Parameters, which determine a distributor's deemed equity and debt, on an annual basis. The Cost of Capital Parameters are effective for the entire Price Cap IR term and are updated for a distributor at each Cost of Service. The Cost of Capital Parameters for BHI's 2026 Application will not be available until October of 2025.

Rate	2021 CoS	2024	2026 CoS
Return on Equity (ROE)	8.34%	9.21%	TBD
Deemed Long-Term Debt Rate	2.85%	4.58%	TBD
Deemed Short-Term Debt Rate	1.75%	6.23%	TBD
Weighted Average Cost of Capital (WACC)	5.00%	6.50%	TBD

OPERATING PERFORMANCE - 2025 BUDGET



EARNINGS BEFORE INTEREST AND TAX



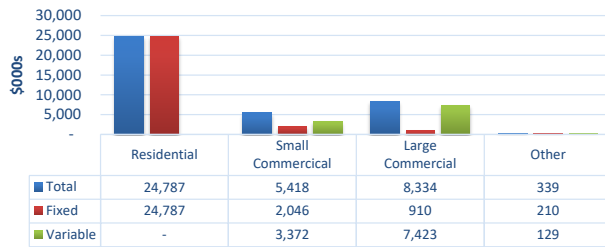
\$000's	2025 Budget	2024 Forecast	F/(U)	% Fcst
DISTRIBUTION REVENUE	38,878	37,106	1,772	105%
OTHER OPERATING REVENUE	1,989	2,858	(869)	70%
DEFERRED REVENUE	1,959	1,598	361	123%
TOTAL REVENUE	42,827	41,562	1,265	103%
O&M	12,795	11,625	(1,170)	110%
B&CS	3,262	3,065	(197)	106%
ADMIN INCL PROPERTY TAX	11,635	10,559	(1,076)	110%
TOTAL OPERATING EXP	27,692	25,249	(2,443)	110%
DEPRECIATION	9,323	8,688	(635)	107%
EBIT	5,812	7,625	(1,813)	76%
NET FINANCE COSTS	2,302	1,442	(860)	160%
NET INCOME BEFORE TAX	3,510	6,183	(2,673)	57%
TOTAL TAXES	404	711	307	57%
NET INCOME AFTER TAX	3,106	5,472	(2,366)	57%

REVENUE - 2025 BUDGET

DISTRIBUTION REVENUE



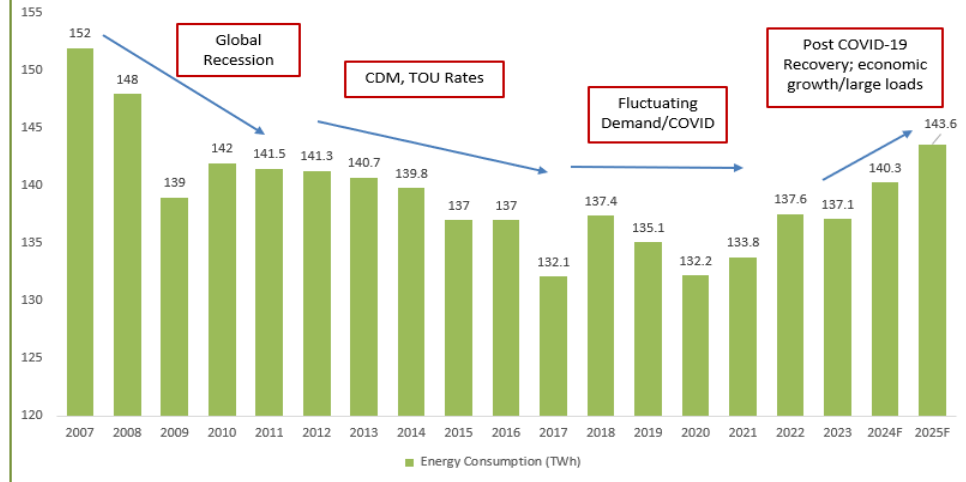
2025 Distribution Revenue by Rate Class



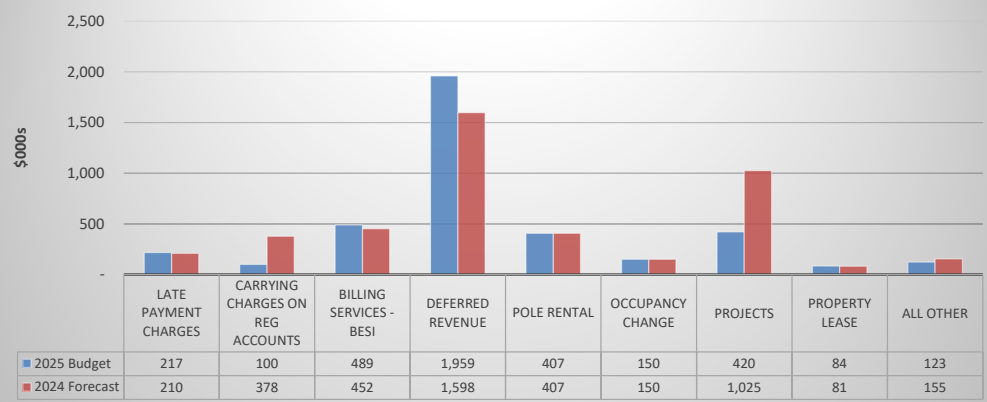
OTHER REVENUE



Historical and Forecasted Ontario Consumption (TWh)



Other Operating Revenue



BALANCE SHEET - 2025 BUDGET

MIFRS BALANCE SHEET	2025 Budget	2024 Forecast	2023 Actuals
Working Capital (\$000s)	6,026	6,230	8,214
Inventory (\$000s)	5,874	5,606	5,486
Current Ratio	1.12	1.12	1.15
Total Assets (\$000s)	313,674	293,297	284,224
Total Liabilities (\$000s)	215,234	195,216	189,537
Total Equity (\$000s)	98,441	98,081	94,687

CREDIT AND BORROWING OPTIONS



Operating Loan

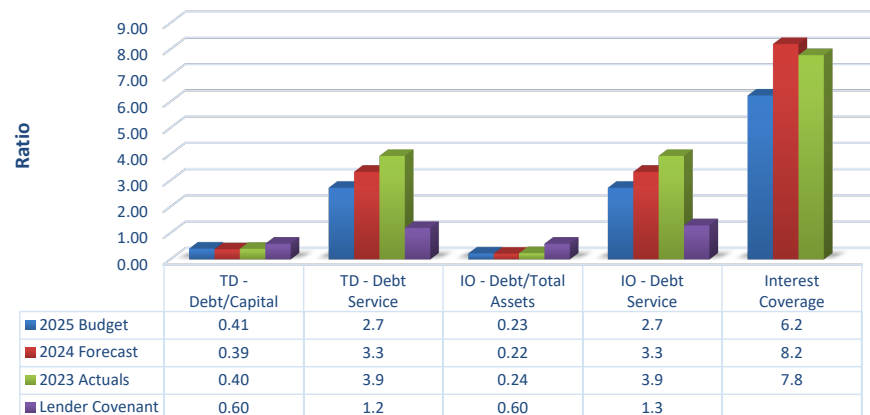


Letter of Credit



Available Debt

Lender Covenants



BHI - 2025 BUDGET LONG TERM DEBT	Amount	Term	Date	Maturity	Rate	O/S 2025	Purpose
Infrastructure Ontario #1	\$10M	15 yrs	Mar-2011	Mar-2026	4.51%	\$0.2M	Smart Meters and capital program
Infrastructure Ontario #2	\$8M	25 yrs	Mar-2013	Mar-2038	4.02%	\$4.9M	Hydro 1 TS capital contributions/capital program
Infrastructure Ontario #3	\$7M	15 yrs	Dec-2018	Mar-2033	3.63%	\$4.2M	Tremaine TS/Breakers and capital program
TD Term Loan - Drawdown #1	\$5M	10 yrs	Mar-2021	Mar-2031	2.47%	\$2.8M	Overall capital program
TD Term Loan - Drawdown #2	\$5M	10 yrs	Jan-2025	Jan-2035	5.35%	\$9.2M	Overall capital program

S/H Note	\$47,878,608	2.85%
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Additional Borrowings (\$M)	
2025-2026 (to next CoS)	\$20
2025-2034 (10-year plan)	\$115

2025 Budget

MANAGEMENT DISCUSSION & ANALYSIS (MD&A)

Earnings Before Tax (EBT)

- EBT of **\$3,510k** is expected to be **\$(2,673)k** unfavorable vs. the 2024 Forecast of \$6,183k primarily due to:
 - o unfavorable other revenue of **\$(869)k** driven by:
 - Management fees billed for the Metrolinx GO Corridor Electrification and Burloak Grade Separation projects of (\$605k). These projects attract fees for BHI's management costs and the bulk of the work is expected to be completed in 2024; and
 - interest on regulatory balances of (\$278k) – regulatory balances represent amounts owing to/due from customers. Balances due from customers are lower in 2025 as a portion of these balances will be recovered from customers throughout 2024 and 2025;
 - o unfavorable depreciation expense **\$(635)k** due to a full year of depreciation on 2024 additions, and ½ year depreciation on 2025 additions, partly offset by assets which are expected to be fully depreciated at the end of 2024;
 - o unfavorable net finance costs of **\$(860)k** driven by higher interest on long term debt (the 2025 budget anticipates drawing down the remaining \$10M of the TD term loan); and
 - o unfavorable operating expenses of **\$(2,443)k**

partly offset by

 - o favorable distribution revenue of **\$1,772k**
 - o favorable deferred revenue of **\$361k** driven by a full year of depreciation on 2024 additions
 - Deferred Revenue reflects IFRS accounting treatment for the receipt of capital contributions for projects. Capital Contributions are received from customers for different capital projects consistent with BHI's Conditions of Service. Contributions received are recorded on the Balance Sheet as both a PP&E asset and as a Deferred Revenue liability.
 - The Deferred Revenue Liability is amortized and recorded on the P&L as Miscellaneous Revenue over the life of the asset. The PP&E asset also is depreciated at the same rate with an equal and offsetting Depreciation Expense recorded on the P&L, resulting in no "bottom line" impact to the P&L.
- EBT in 2025 is expected to be lower than prior years as (i) BHI fills vacant positions (ii) the Metrolinx GO Corridor Electrification projects, which earn management fees, start to wind down and (iii) BHI experiences increased costs associated with 3rd party services such as tree trimming.

Distribution Revenue

- Distribution Revenues will be set under the IRM process for 2025. Revenues of \$38,878k are expected to be \$1,772k favorable vs. the 2024 forecast of \$37,106k primarily driven by the inflationary increase in rates of 3.60% .

Consumption/Demand/Customer Forecasts

- o The forecast for 2025 energy (kWh), demand (kW) and # of customers is based on historical patterns. BHI conducted a comprehensive regression analysis to forecast customer counts, consumption and demand, as part of the requirements for its Cost of Service Application
- o Any changes in consumption and demand impact revenue for small and large commercial customers as the residential rate class is billed on a fixed basis. Customer growth has been relatively flat in 2024. Assumptions for 2025 include:
 - Customer growth of 0.5% and 1.0% for residential and GS<50 customers respectively;

- kWh increase of approximately 1% for rate classes billed on consumption (small commercial, USL) due to economic growth, and additional EV and heating loads;
- kW (demand) decrease of approximately 3% for large commercial customers. Although this class will experience growth due to the economy, EVs and electric heating, this consequent increase in demand is more than offset by conservation savings from energy efficiency programs which are currently geared toward large commercial customers
- In general, a significant increase in load related to electrification of transit and heating is not expected to impact consumption and demand until post 2026.

Operating Expenses

- 10% overall increase vs. the 2024 Forecast
- Payroll Budget Assumptions
 - 4.25% annual increase for non-union staff
 - 3.75% annual increase for union staff based on new collective agreement
 - 6.0% increase vs. the 2024 forecast driven by Group Life 5%, LTD Benefits 3%, Extended Health Benefits 0%, Dental Benefits 18%
- Operations & Maintenance (Control Room /Stations /Meter Shop/ Distribution (Lines)) costs are forecast to be unfavorable vs. the 2024 forecast by **\$(1,170)k** due to:
 - \$(784)k operations and engineering labour driven by inflationary increases in wages, filling vacancies, and a higher percentage of time allocated to operating expenses versus capital; partly offset by the transfer of two staff to Information Technology; and
 - \$(480)k tree trimming costs driven by higher third party labour costs; partly offset by
 - \$87k asset removals/inspections/maintenance - 2024 included preventative maintenance for the majority of BHI's Scadamate Switches. In 2025 this maintenance will be performed on a 5-year cycle.
- Billing & Collecting (Billing Department, Call Centre, Meter Reading) costs are forecast to be **\$(197)k** unfavorable vs. the 2024 forecast due to:
 - replacement of temporary staff with permanent hires \$(102)k
 - an increase in third party settlement and meter reading costs of \$(66k)
- Administration Department (Executive, Human Resources, IT, Purchasing, Regulatory, Safety, Communications, Accounting, Board of Directors) costs are forecast to be **\$(1,076)k** unfavorable vs. the 2024 forecast due to:
 - \$(530)k in salaries, benefits and temporary staff due to inflation, the transfer of two staff from Engineering to Information Technology, and a full year of compensation for the executive assistant;
 - \$(148)k bonus payments due to an increase in the number of eligible employees;
 - \$(248)k in information and technology costs for general software support and maintenance, increased ERP software support to facilitate automation, an increase in hosting services for BHI's CIS, and a subscription for 3rd party IT support services; and
 - \$(120)k for other expenses including communications, insurance, conferences, and OEB costs;

partly offset by

 - \$79k in legal fees associated with collective bargaining and settlements

Capital Expenditures

BHI - 2025 BUDGET CAPITAL EXPENDITURES	2025 BUDGET	2024 FORECAST	VARIANCE	
			\$ Incr/(Decr)	% Fcst
GROSS CAPITAL	31,683	29,714	1,969	107 %
CONTRIBUTED CAPITAL	(15,025)	(15,682)	657	96 %
NET CAPITAL	16,658	14,033	2,626	119 %
BUILDINGS	232	805	(573)	29 %
LAND RIGHTS	223	—	223	— %
SUBSTATION EQUIPMENT	1,295	1,283	12	101 %
U/G PROJECTS	2,182	3,199	(1,017)	68 %
O/H PROJECTS	7,912	3,212	4,700	246 %
TRANSFORMERS	812	1,164	(353)	70 %
METERS	1,626	1,946	(321)	84 %
ROLLING STOCK	950	410	540	232 %
TOOLS	20	29	(9)	68 %
COMPUTER HARDWARE/SOFTWARE	652	1,248	(596)	52 %
OFFICE EQUIPMENT	20	—	20	— %
SUB TOTAL	15,923	13,298	2,626	120 %
DEVELOPER BUYBACKS	735	735	—	100 %
TOTAL CAPITAL EXPENDITURES	16,658	14,033	2,626	119 %

- **Net Capital Expenditures** are forecast to be **\$2,626k** higher than the 2024 forecast driven by:
 - o Land Rights \$223k - Includes the 10-year true-up of the Hydro One Tremaine TS CCRA and the final true-up of the Hydro One Bronte TS CCRA;
 - o O/H projects \$4,700k – Primarily due to the Dundas Road Widening project (Guelph line to Kerns Rd.), which was delayed from 2024 and is now expected to be completed in 2025; partly offset by lower expenditures for pole replacements and general service projects;
 - o Rolling Stock \$540k - 2025 includes the purchase of a body and chassis for two bucket trucks, and an additional small vehicle.

partly offset by the following decreases:

- o Buildings \$(573)k - 2024 included expenditures for replacement/refurbishment of the receiving dock, and construction of a retaining wall in the yard. In addition, expenditures for roof replacement at 1340 Brant Street are expected to be lower than 2024;
- o U/G Projects \$(1,017)k – Expenditures are forecasted to return to historical levels for underground cables and general service projects - 2024 expenditures included a large number of reactive replacements;
- o Transformers \$(353)k - transformer replacements are expected to return to historical levels - 2024 included the replacement of leaky/faulty transformers;
- o Meters \$(321)k - No further expenditures are planned for the Burlington TS metering project, which is expected to be completed in 2024; partially offset by higher demand for suite metering projects; and
- o Computer Hardware/Software \$(596)k – 2024 included the implementation of the new OMS which is expected to be completed in 2024.

- **Contributed Capital** is forecast to be \$657k lower than the 2024 forecast driven by:
 - o \$6,175k - the Metrolinx GO Corridor Electrification project, contracted with Metrolinx, is expected to be completed in 2024;
 - o \$884k - Expenditures on General service projects and the associated capital contributions are expected to lower in 2025;

partly offset by the following increases:

- o (\$4,209k) - The Dundas Road Widening project (Guelph Line to Kerns Rd. and up to Northampton Blvd) is expected to be completed in 2025;
- o (\$2,204k) - Increased capital contributions as a result of a higher number of system expansion projects in the Downtown core area.

2026 Forecast

MANAGEMENT DISCUSSION & ANALYSIS (MD&A)

2026 Cost of Service Rate Application

Burlington Hydro is rebasing its rates in 2026 which is driving an increase in the revenue required to provide service to its customers. In addition to achieving BHI's strategic objectives, the increase in revenue requirement is required to address specific key capital and operational requirements.

- responding to evolving policy and customer expectations in response to the energy transition, such as connecting electric vehicles, solar panels, and energy storage;
- responding to increased demand in the City of Burlington due to electrification and population growth;
- ensuring a sustainable, resilient and reliable distribution system capable of accommodating more extreme weather events;
- addressing declining reliability, due to failure of aging infrastructure, through increased proactive replacements, asset testing and maintenance
- integrating cloud computing, artificial intelligence and non-wires solutions into operations;
- protecting customers' data and the grid against intensifying cyber security threats driven by rapid technology advancements and changing geopolitical dynamics;
- complying with new or expanded legal and regulatory requirements, including customer service, safety, and environmental obligations;
- addressing upward cost pressures on labour which are impacting outsourced services such as tree trimming and locates; and
- addressing a variety of externally-driven costs such as regulatory and insurance costs

The increase in revenue requirement is expected to result in a distribution rate increase of 25.1% and a total bill increase of 7.0% versus 2025 for an average residential customer. In addition to addressing specific key capital and operational requirements, the increase in distribution revenue is also driven by a change in the cost of capital parameters since BHI's last Cost of Service application.

Customer Engagement

As part of its 2026 Cost of Service application, BHI conducted an extensive customer engagement exercise as consisting of two phases, including soliciting feedback from customers on its major investments proposed for 2026 to 2030.

The iterative design of the Customer Engagement process was intended to enable BHI to first gain in-depth insight into the needs, values, interests, and priorities of its customers through the foundational Customer Interviews conducted in Phase I, which were incorporated into the business planning process. As BHI's plans were refined and the related spending and impacts on customer bills were developed further, broader customer feedback was sought from a larger sample of customers through a Web Survey and a Key Customer Webinar, conducted in Phase II. BHI has used this insight throughout its Business Planning process to ensure its Cost of Service application and 2026 financial plan are aligned with its customers.

In total, more than **3,500** residential, small commercial and large commercial/industrial customers across a diverse cross-section of the Burlington community participated in the Customer Engagement process.

The results of the engagement show that customers are aligned with BHI's strategic priorities of providing **safe** and **reliable** electricity at **prudent** rates. Tactical priorities that customers are most aligned with include

proactively replacing deteriorated infrastructure, upgrading the distribution system to respond to increasing extreme weather, and investing in new and innovative technology to modernize the grid.

More than 90% of customers agreed that BHI's capital expenditure priorities are important, with more than 85% saying that the level of spending was appropriate. A subset of customers (<20%) indicated that the overall bill impact of BHI's proposed plan wasn't appropriate – BHI has incorporated this feedback into its plan through targeted reductions and re-pacing of expenditures to mitigate the overall bill impact.

Achieving BHI's strategic objectives, addressing specific key capital and operational requirements, and incorporating customer feedback informed the development of the business plan and financials for 2026.

BHI - 2026 BUDGET NET INCOME	2026 FORECAST	2025 BUDGET	VARIANCE	
			\$ F/(U)	% Fcst
DISTRIBUTION REVENUE	48,141	38,878	9,263	124 %
OTHER REVENUE	2,195	1,989	206	110 %
DEFERRED REVENUE	2,376	1,959	417	121 %
TOTAL REVENUE	52,712	42,827	9,885	123 %
OPERATIONS AND MAINTENANCE	13,703	12,795	(907)	107 %
BILLING AND CUSTOMER SERVICE	3,429	3,262	(167)	105 %
ADMIN INCL PROPERTY TAX	13,033	11,635	(1,398)	112 %
TOTAL OPERATING EXPENSES	30,164	27,692	(2,473)	109 %
DEPRECIATION	10,179	9,323	(856)	109 %
EARNINGS BEFORE INTEREST AND TAX	12,369	5,812	6,557	213 %
NET FINANCE COSTS	3,498	2,302	(1,196)	152 %
NET INCOME BEFORE TAXES	8,871	3,510	5,361	253 %
TOTAL TAXES	1,020	404	(616)	253 %
NET INCOME AFTER TAXES	7,850	3,106	4,744	253 %

Earnings Before Tax (EBT)

- EBT of **\$8,871k** is expected to be **\$5,361k** favorable vs. the 2025 Budget of \$3,510k primarily due to:
 - favorable distribution revenue of **\$9,263k** driven by the rebasing of rates in 2026;
 - favorable other revenue of **\$206k** driven by
 - Management fees billed for Phase 2 of the Burloak Grade Separation project of \$139k; and
 - higher late payment charges of \$52k which are directly proportional to the increase in distribution revenue.
 - favorable deferred revenue of **\$417k** driven by a full year of depreciation on 2025 additions, and an increase in contributed capital associated with Phase II of the Burloak Grade Separation project, the Dundas Road Widening Project (Appleby Line to Northhampton), and expansion costs associated with development at the Major Transit Station Areas.
 - Deferred Revenue reflects IFRS accounting treatment for the receipt of capital contributions for projects. Capital Contributions are received from customers for different capital projects consistent with BHI's Conditions of Service. Contributions

received are recorded on the Balance Sheet as both a PP&E asset and as a Deferred Revenue liability.

- The Deferred Revenue Liability is amortized and recorded on the P&L as Miscellaneous Revenue over the life of the asset. The PP&E asset also is depreciated at the same rate with an equal and offsetting Depreciation Expense recorded on the P&L, resulting in no “bottom line” impact to the P&L

partly offset by

- unfavorable operating expenses **\$(2,473)k** described in further detail below;
- unfavorable depreciation expense **\$(856)k** due to a full year of depreciation on 2025 additions, and ½ year depreciation on 2026 additions, partly offset by assets which are expected to be fully depreciated at the end of 2025; and
- unfavorable net finance costs of **\$(1,196)k** driven by higher interest on long term debt (the 2026 budget anticipates requiring an additional \$10M in debt)

Distribution Revenue

- Distribution Revenues will be set on a Cost of Service basis for 2026. Revenues of \$48,141k are expected to be \$9,263k favorable vs. the 2025 Budget of \$38,878k.

Consumption/Demand/Customer Forecasts

- BHI's forecast for 2026 energy (kWh), demand (kW) and # of customers is based on a comprehensive regression analysis as part of the requirements for its Cost of Service Application. Variables considered were weather, the economy, population growth, increased loads from electric vehicles and heating, and conservation and demand management.
- Since distribution revenues are set on a Cost of Service basis in 2026, consumption, demand and customer count forecasts will only impact the rates that BHI is approved to charge. However, should the load forecast approved in BHI's rate application be different than actuals, BHI's distribution revenue will be affected (i.e. if actual counts and load are lower than approved, BHI will undercollect its revenue requirement).
- Assumptions for 2026 are as follows:
 - Customer growth of 0.5% and 1.0% for residential and GS<50 customers respectively;
 - kWh increase for rate classes billed on consumption (small commercial, USL) due to economic growth, and additional EV and heating loads;
 - kW (demand) decrease of approximately 2% for large commercial customers. Although this class will experience growth due to the economy, EVs and electric heating, this consequent increase in demand is more than offset by conservation savings from energy efficiency programs which are currently geared toward large commercial customers
 - In general, a significant increase in load related to electrification of transit and heating is not expected to impact consumption and demand until post 2026.

Operating Expenses

- 9% overall increase vs. the 2025 Budget
- Payroll and Benefits Forecast Assumptions
 - o 4.00% annual increase for non-union staff
 - o 3.00% annual increase for union staff based on collective agreement
 - o 16.5% increase vs. the 2025 Budget driven by Group Life 8%, LTD Benefits 5%, Extended Health Benefits 15%, Dental Benefits 16%

BHI's workforce is expected to undergo significant change as a result of the following:

- o The Ontario energy sector is undergoing transformational change driven by growth, electrification, technological advancements, changing regulatory requirements, and evolving consumer expectations. These changes create both challenges and opportunities for BHI and the broader industry. Upskilling existing employees and creating new positions is required to meet anticipated growth and adapt to the changing environment.
- o The importance of, and public focus on, sustainability, resilience, and reliability, especially in light of climate change, increases the pressure on BHI to be proactive in workforce planning. To meet future demands, BHI must ensure it has the capacity to innovate while maintaining and hardening its grid. Inadequate planning could lead to delays in grid modernization, service interruptions, and an inability to meet regulatory and government net-zero targets.
- o These challenges are compounded by increasing work demands, driven in part by anticipated housing growth and the need to replace aging distribution infrastructure. Additionally, evolving customer expectations will require new roles focused on customer service and internal support.

In order to manage these changes effectively, BHI plans to hire 14 new positions in 2026 as identified in the table below, which are incorporated into the operating expenses for 2026.

Department	Position	Purpose
Accounting	Financial Analyst	Energy Transition, Growth, Grid Modernization
Control Room	Apprentice	Succession Planning, growth
Engineering	Supervisor, Energy Transition Integration	Energy Transition
	Supervisor, GIS	Replacement for redeployment to IT
	Supervisor, Planning & Grid Modernization	Growth, Grid Modernization
	Operations Clerk	Growth, Grid Modernization
	GIS Technician	Replacement for redeployment to IT
	Engineering Technician	Energy Transition, Growth
	Engineering Technician	Energy Transition, Growth
HR	HR Analyst/Generalist	Organizational Growth
Metering	Apprentice	Energy Transition, Growth
Regulatory	Regulatory Analyst	Energy Transition, Growth, Grid Modernization
	Senior Mgr, Capital Planning & Supply Chain	Energy Transition, Growth, Grid Modernization
Safety	Facilities Specialist/Coordinator	Organizational Growth, Building Maintenance

- Operations & Maintenance (Control Room /Stations /Meter Shop/ Distribution (Lines)) costs are forecast to be unfavorable vs. the 2025 Budget by **\$(907)k** due to:
 - o \$(1,195)k increase in salaries and wages due to inflation, the hiring of two apprentices in each of the control room and metering, and the hiring of seven employees in engineering; partly offset by
 - o \$300k in licensing and support costs for operational technology, transferred from engineering to the information technology department to centralize processes; and
 - o \$72k in metering reading costs - savings were realized due to consolidation of ITRON interval meter services into BHI's settlement services with Utilismart.

- Billing & Collecting (Billing Department, Call Centre, Meter Reading) costs are forecast to be **\$(167)k** unfavorable vs. the 2025 Budget primarily due to inflationary increases in salaries and benefits

- Administration Department (Executive, Human Resources, IT, Purchasing, Regulatory, Safety, Communications, Accounting, Board of Directors) costs are forecast to be unfavorable vs. the 2025 Budget by **\$(1,398)k** due to:
 - o \$(964)k in salaries, benefits and temporary staff due to inflation and the addition of five full time staff across the Accounting, HR, Regulatory and Safety departments;
 - o \$(111)k bonus payments due to an increase in the number of eligible employees;
 - o \$(363)k in information and technology costs, \$300k of which were transferred from the engineering department. The remaining \$54k increase is related to software support and maintenance for OMS;
 - o \$(54k) for training costs associated with a higher number of employees and additional requirements; and
 - o \$(79)k for other expenses including communications, insurance, and OEB costs; partly offset by
 - o \$229k lower costs associated with rate rebasing for studies and consultants in preparation for the 2026 Cost of Service - the majority of these costs will be incurred in 2024 and 2025.

Capital Expenditures

BHI - 2026 BUDGET CAPITAL EXPENDITURES	2026 FORECAST	2025 BUDGET	VARIANCE	
			\$ Incr/(Decr)	% Fcst
GROSS CAPITAL	43,648	31,683	11,965	138 %
CONTRIBUTED CAPITAL	(21,560)	(15,025)	(6,535)	143 %
NET CAPITAL	22,088	16,658	5,430	133 %
BUILDINGS	856	232	624	369 %
LAND RIGHTS	—	223	(223)	— %
SUBSTATION EQUIPMENT	1,545	1,295	250	119 %
U/G PROJECTS	4,723	2,182	2,541	216 %
O/H PROJECTS	7,463	7,912	(449)	94 %
TRANSFORMERS	828	812	16	102 %
METERS	4,199	1,626	2,573	258 %
ROLLING STOCK	1,031	950	81	109 %
TOOLS	20	20	—	102 %
COMPUTER HARDWARE/SOFTWARE	652	652	—	100 %
OFFICE EQUIPMENT	20	20	—	102 %
SUB TOTAL	21,338	15,923	5,415	134 %
DEVELOPER BUYBACKS	750	735	15	102 %
TOTAL CAPITAL EXPENDITURES	22,088	16,658	5,430	133 %

- **Net Capital Expenditures** are forecast to be **\$5,430k** higher than the 2025 Budget driven by:
 - o Buildings \$624k - 2026 includes (i) replacement/refurbishment of sections of its roof at 1340 Brant Street that are beyond economic repair, (ii) fence replacement/hardening to enhance security in the yard, (iii) expansion and paving of the parking lot south of BHI's head office; and (iv) expansion study for the vacant land south of BHI's head office.
 - o Substation Equipment \$250k - Increased replacement of number of Relays based on the BHI's Asset Condition Assessment (ACA) and higher expenditures for Circuit breakers replacements due to an increase in unit cost replacement;
 - o U/G Projects \$2,541k – Increased replacement of Underground cables based on BHI's ACA; and expansion costs for development of the Major Transit Station Areas (Burlington GO);
 - o Meters \$2,573k- Replacement of smart meters reaching the end-of-life as required by Measurement Canada; and replacement of BHI's AMI Collector System;

partly offset by the following decreases:

- o Land Rights \$(223)k - 2025 included expenditures for the 10-year true-up for the Tremaine TS CCRA and the final true-up of the Bronte TS CCRA in 2025;
- o O/H Projects \$(449)k – Major work on the Dundas Road widening project is expected to be completed in 2025, partially offset by (i) higher expenditures for pole replacements and (ii) expenditures for expansion costs for development of the Major Transit Station Areas (Aldershot and Burlington GO).
- **Contributed Capital** is forecast to be \$(6,535)k higher than the 2025 Budget driven by:
 - o \$(3,269)k - Capital contributions received for the Dundas Rd Widening project;
 - o \$(4,998)k - Capital contributions received from developers for expansion costs associated with the development of Major Transit Station Areas (Aldershot and Burlington GO);
 - o \$(856)k - Capital contributions received for Phase II of the Burloak Grade Separation project.

These increases are partly offset by the expected completion of projects in the Downtown core area in 2025 of \$2,248k.

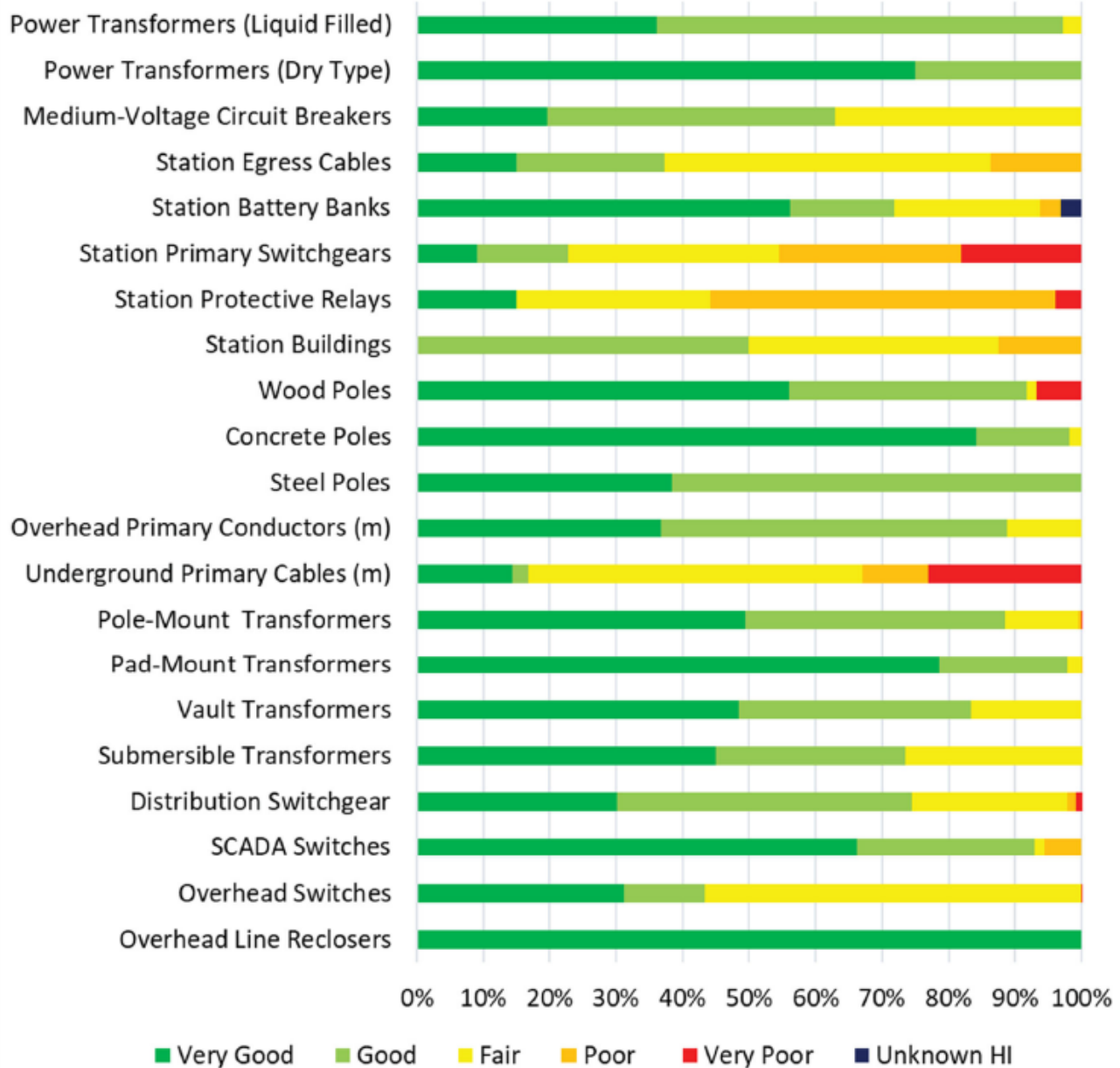
BHI is required to file a Distribution System Plan, including a forecast of capital expenditures from 2026-2030, as part of its 2026 Cost of Service Rate Application. BHI's capital expenditure forecast is provided below.

BHI - 2025-2030 CAPITAL EXPENDITURES		2024 FCST	2025 BUDGET	2026 FCST	2027 FCST	2028 FCST	2029 FCST	2030 FCST
GROSS CAPITAL		29,714	31,683	43,648	33,428	34,904	25,872	24,842
CONTRIBUTED CAPITAL		(15,682)	(15,025)	(21,560)	(10,997)	(15,709)	(9,095)	(9,280)
NET CAPITAL		14,033	16,658	22,088	22,431	19,195	16,777	15,562
BUILDINGS		805	232	856	545	584	335	298
SUBSTATION EQUIPMENT		1,283	1,295	1,545	1,524	1,554	1,585	1,617
U/G PROJECTS		3,199	2,182	4,723	4,337	3,899	3,652	3,395
O/H PROJECTS		3,212	7,912	7,463	5,133	5,358	5,248	5,575
TRANSFORMERS		1,164	812	828	843	860	877	895
METERS		1,946	1,626	4,199	4,161	3,894	2,095	2,109
ROLLING STOCK		410	950	1,031	911	745	685	267
TOOLS		29	20	20	21	21	22	22
COMPUTER HARDWARE/SOFTWARE		1,248	652	652	4,182	1,508	1,500	575
OFFICE EQUIPMENT		—	20	20	47	29	22	35
SUB TOTAL		13,298	15,923	21,338	21,703	18,453	16,020	14,789
DEVELOPER BUYBACKS		735	735	750	728	743	757	773
TOTAL CAPITAL EXPENDITURES		14,033	16,658	22,088	22,431	19,195	16,777	15,562

BHI's Distribution System Plan for 2026-2030 is focused on achieving key strategic objectives in safety, customer value, reliability, technology, and efficiency.

BHI's replacement programs are informed by the condition of its assets as determined by an ACA conducted as part of its Distribution System Plan. An ACA collects condition data on each of its assets, and based on that data determines the health index of each asset which in turn categorizes that asset into health categories. The DSP addresses those assets in poor/very poor condition (which may require replacement in the 5-year DSP term), namely, station switchgears, relays, wood poles, and underground primary cables.

BHI Asset Health Index Results (%)



Variances in expenditures over the 5-year DSP term are primarily driven by:

- **Buildings** - BHI plans to invest in roof replacements or refurbishments for areas beyond economic repair between 2026 and 2028. Yard security will be enhanced in 2026 with the replacement and reinforcement of fences. Parking lot expansions and refurbishment will commence in 2026 south of BHI's head office and in 2027 and 2028 north of BHI's head office.
- **Substation, Underground, and Overhead projects** - BHI's recent Asset Condition Assessment (ACA), identified a number of asset categories with a material number of their population in poor or very poor condition, specifically: Switchgear, Relays, Poles, and Underground cables. BHI plans to increase spending on proactive replacement of these assets from 2026 to 2030. Additional expenditures are also expected for expansions associated with the development of Major Transit Stations Areas. These increases are more than offset by the completion of the Dundas Road road widening project in 2026.
- **Meters** - BHI is planning a phased replacement of its smart meters over 2026 to 2028 to comply with Measurement Canada regulations. These meters were installed in 2001 as part of the Smart Meter initiative and are due for replacement.
- **Computer Hardware/Software** - In 2027, BHI plans to replace its SCADA system and install an Advanced Distribution Management System (ADMS) which will support predictive and autonomous operations, automate outage restoration and support an optimized distribution grid that accelerates the energy transition through facilitating adoption of microgrids and electric vehicles. In 2028/2029 BHI plans to replace its ERP.
- **Other** - BHI is planning to replace some of its large vehicle fleet in 2026 and 2027 and its ERP system over 2028-2029.

2025 and 2026 Dividends and Debt Structure

Dividends

BHI - 2025 BUDGET DIVIDENDS \$000s	2024 Update	2025 Budget	2026 Forecast	2027 Forecast	2028 Forecast
31-MAR - TRUE-UP PRIOR YEAR	184	912	333	2,136	1,682
31-MAR - WORKING CAPITAL BEC	50	50	50	50	50
31-MAR - REGULAR PAYMENT	417	417	417	417	417
31-JUN - REGULAR PAYMENT	417	417	417	417	417
31-SEP - REGULAR PAYMENT	417	417	417	417	417
31-DEC - REGULAR PAYMENT	417	417	417	417	417
SUB-TOTAL REGULAR DIVIDENDS	1,902	2,629	2,050	3,853	3,399
SPECIAL DIVIDEND - CAP STUDY	58	—	—	—	—
SPECIAL DIVIDEND - FORESTRY LEASE	116	118	120	—	—
TOTAL DIVIDENDS	2,076	2,747	2,170	3,853	3,399

- Regular Dividends are forecast at \$2,629k for 2025, which includes:
 - a forecasted \$912k true-up payment for 2023 to result in a 50% payout on BEC consolidated net income
 - a \$50k payment to provide BEC with working capital
 - regular 2025 dividend payments of \$1,668k (BHI's portion of the \$2M minimum payment to be made to the City of Burlington)
- Special Dividends are forecast at \$118k for 2025 which represents:
 - \$118K for the value of the 2025 property and trailer lease for the City of Burlington Forestry Group.
- Dividends related to 2025 results are expected to return to historical levels (\$2M plus \$50K in working capital for BEC). Due to the anticipated increase in distribution revenue as a result of the 2026 Cost of Service rate application, it is anticipated that dividend payments to BEC will start to increase beyond \$2.4M beginning in 2027. Dividends forecast in the 2027-2034 fiscal years represent 50% of consolidated net income.

Long Term Debt

An additional \$10M of long-term debt is planned for 2025. The facility is already in place with the TD Bank and is available for drawdown when required. This debt will be used to assist in financing the 2025 capital program. In addition, \$10M of long-term debt is planned for 2026.

Shareholder Promissory Note

The 2025 budget uses a rate of 2.85% as was approved during the 2021 COS application. This is the approved deemed OEB long-term debt rate effective May 1, 2021. This rate will be reset during the 2026 Cost of Service rate application. The rate assumed for 2026-2034 is 4.58% based on the OEB's Cost of capital parameters for 2024 rate applications.

Short-term Debt with TD Bank

The budget includes the costs of maintaining a \$20M operating line of credit for working capital needs and an \$18M letter of credit facility to cover prudential requirements related to the monthly power bill with the IESO.

Leverage and Cash Flow

The OEB deemed debt/equity capital structure is set at 60%/40% of an LDC's approved rate base. BHI's approved rate base is \$147M which would permit a debt position for rate setting purposes of \$88M.

BHI's forecasted outstanding total debt at year end 2025 is \$69M, which is within the OEB limit and also continues to provide flexibility to increase long-term borrowings as needed for both ongoing capital expenditures and in the event of a catastrophic event.

Lender covenants limit Total Debt/Total capital to 0.60. Total Debt/Total Capital forecasted at the end of 2025 is 0.41.

The 10-year time horizon forecasts additional borrowings of \$10M until BHI's next rebasing application in 2026 (i.e. 2025) and \$115M over the forecast period. BHI has capacity to increase its leverage to fund capital projects with a solid debt/capital structure. Forecasted borrowings over the 10-year time horizon maintain company leverage within lender covenants.

Burlington Hydro Inc.
2025 Business Plan
10-year Financial Statements

BURLINGTON HYDRO INC.	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
BALANCE SHEET (\$000s)	<u>Update</u>	<u>Budget</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>
<u>Current Assets</u>											
Cash	4,554	2,926	1,040	589	2,159	4,869	3,163	2,959	2,759	1,966	684
Securities held as Customer Deposits	2,699	2,916	3,611	3,700	3,789	3,885	4,008	4,544	4,715	4,899	5,079
Accounts Receivable	19,897	20,385	21,537	21,988	22,444	22,917	23,428	24,430	25,012	25,617	26,225
Unbilled Revenue	19,275	19,748	20,864	21,301	21,743	22,201	22,696	23,666	24,230	24,816	25,406
Income Taxes Receivable	-	-	-	-	-	-	-	-	-	-	-
Inventory	5,606	5,874	6,018	6,167	6,314	6,475	6,680	7,573	7,858	8,165	8,465
Work Orders in Progress	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
Prepaid Expenses	827	827	827	827	827	827	827	827	827	827	827
Total Current Assets	56,357	56,175	57,395	58,072	60,776	64,675	64,302	67,499	68,900	69,790	70,186
Net Property Plant & Equipment	224,937	247,297	280,766	303,200	326,364	340,022	352,243	363,152	372,693	386,991	401,481
Deferred Tax Assets	-	-	-	-	-	-	-	-	-	-	-
TOTAL ASSETS	281,294	303,472	338,161	361,272	387,140	404,697	416,545	430,651	441,594	456,781	471,667
Net Regulatory Asset Balances	12,003	10,202	8,869	8,869	8,869	8,869	8,869	8,869	8,869	8,869	8,869
TOTAL ASSETS & Regulatory Balances	293,297	313,674	347,030	370,141	396,009	413,566	425,414	439,520	450,463	465,650	480,536
<u>Current Liabilities</u>											
Current Portion of Long Term Debt	2,902	3,124	4,217	5,604	7,060	8,189	8,946	10,034	11,323	12,060	11,335
Accts Payable & Accrued Liabilities	29,417	30,270	31,138	31,823	32,523	33,240	33,973	34,724	35,492	36,278	37,082
Customer Deposits	2,699	2,916	3,611	3,700	3,789	3,885	4,008	4,544	4,715	4,899	5,079
Work Order Deposits	11,270	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Deferred Revenue - CDM Programs	-	-	-	-	-	-	-	-	-	-	-
Other Liabilities	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840	3,840
Total Current Liabilities	50,127	50,149	52,806	54,967	57,211	59,153	60,767	63,141	65,369	67,076	67,336
Deferred Revenue - Cap Contributions	74,489	87,554	106,739	115,172	128,031	134,141	140,298	144,189	148,137	157,071	166,049
Shareholder Note Payable	47,879	47,879	47,879	47,879	47,879	47,879	47,879	47,879	47,879	47,879	47,879
Long Term Debt	11,336	18,213	23,995	33,391	41,331	48,143	49,196	49,163	47,840	45,779	44,444
Deferred Tax Liability	7,789	7,789	7,789	7,789	7,789	7,789	7,789	7,789	7,789	7,789	7,789
Liability for Future Benefits	3,596	3,650	3,702	3,754	3,806	3,858	3,910	3,962	4,014	4,066	4,118
TOTAL LIABILITIES	195,216	215,234	242,910	262,952	286,048	300,963	309,840	316,122	321,027	329,660	337,615
<u>Equity</u>											
Capital Stock	45,139	45,139	45,139	45,139	45,139	45,139	45,139	45,139	45,139	45,139	45,139
Paid-up Capital	876	876	876	876	876	876	876	876	876	876	876
Retained Earnings	51,614	51,974	57,654	60,722	63,494	66,136	69,107	76,930	82,968	89,523	96,455
Accumulated Other Compr Income	452	452	452	452	452	452	452	452	452	452	452
TOTAL EQUITY	98,081	98,441	104,121	107,189	109,961	112,603	115,574	123,397	129,435	135,990	142,922
Net Regulatory Liability Balances	-	-	-	-	-	-	-	-	-	-	-
TOTAL LIABILITIES, EQUITY & Reg Balances	293,297	313,674	347,030	370,141	396,009	413,566	425,414	439,520	450,463	465,650	480,536

BURLINGTON HYDRO INC.	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
STATEMENT OF Retained Earnings (\$000'S)	<u>Update</u>	<u>Budget</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>
Opening Retained Earnings	48,218	51,614	51,974	57,654	60,722	63,494	66,136	69,107	76,930	82,968	89,523
Net Income (loss)	5,472	3,106	7,850	6,921	6,171	5,682	5,780	10,726	11,451	12,330	13,147
Dividends	(2,076)	(2,747)	(2,170)	(3,853)	(3,399)	(3,040)	(2,809)	(2,903)	(5,413)	(5,776)	(6,215)
Closing Retained Earnings	51,614	51,974	57,654	60,722	63,494	66,136	69,107	76,930	82,968	89,523	96,455

RATIO ANALYSIS	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2031</u>	<u>2032</u>	<u>2033</u>	<u>2034</u>
Total Debt/Total Capital - TD Covenant .6	38.8%	41.3%	42.2%	44.8%	46.7%	48.1%	47.8%	46.5%	45.3%	43.7%	42.0%
Debt to Total Assets - IO Covenant .6	22.1%	22.8%	22.5%	24.0%	24.9%	25.8%	25.5%	24.9%	24.2%	23.1%	22.0%
Current Ratio	1.12	1.12	1.09	1.06	1.06	1.09	1.06	1.07	1.05	1.04	1.04
Interest Coverage	8.2	6.2	6.3	5.5	5.0	4.6	4.6	5.7	5.9	6.1	6.5
Debt Service Coverage - TD/IO Covenant 1.3	3.3	2.7	2.9	2.3	2.0	1.8	1.7	2.0	1.9	1.9	2.1

BURLINGTON HYDRO INC.	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
STATEMENT OF CASH FLOWS (\$000s)	<u>Update</u>	<u>Budget</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>
<u>Operating Activities</u>											
Net Income after Taxes	5,472	3,106	7,850	6,921	6,171	5,682	5,780	10,726	11,451	12,330	13,147
Depreciation	8,688	9,323	10,179	10,994	11,740	12,214	12,622	13,023	13,361	13,798	14,243
Deferred Revenue Amortization	(1,598)	(1,959)	(2,376)	(2,563)	(2,850)	(2,986)	(3,123)	(3,209)	(3,297)	(3,496)	(3,696)
	12,562	10,470	15,653	15,352	15,062	14,910	15,279	20,539	21,515	22,632	23,694
<u>Non-Cash Working Capital Changes</u>											
Change in A/R	5,956	(488)	(1,152)	(451)	(456)	(473)	(511)	(1,001)	(582)	(605)	(608)
Change in Unbilled Revenue	285	(473)	(1,116)	(437)	(442)	(458)	(495)	(970)	(564)	(586)	(589)
Change in Inventory	(120)	(268)	(144)	(150)	(147)	(161)	(205)	(893)	(285)	(307)	(300)
Change in WIP	62	-	-	-	-	-	-	-	-	-	-
Change in A/P & Accrued Liabilities	(3,887)	853	868	685	700	717	733	751	768	786	804
Change in W/O Deposits	(1,117)	(1,270)	-	-	-	-	-	-	-	-	-
Change in Deferred Revenue	(1,336)	-	-	-	-	-	-	-	-	-	-
Change in Liability for Future Benefits	5	54	52	52	52	52	52	52	52	52	52
Change in Regulatory Balances	4,501	1,801	1,333	-	-	-	-	-	-	-	-
	4,976	209	(158)	(302)	(293)	(323)	(425)	(2,063)	(610)	(661)	(642)
Operating Cash Flow	17,539	10,679	15,496	15,050	14,768	14,586	14,854	18,477	20,905	21,971	23,052
<u>Investing Activities</u>											
Net Additions to PP&E	14,033	16,658	22,088	22,431	19,195	16,777	15,562	16,832	15,658	15,666	16,059
Additions to PP&E (from CC)	15,682	15,025	21,560	10,997	15,709	9,095	9,280	7,100	7,245	12,430	12,674
Net Cash Used for Investing Activities	29,714	31,683	43,648	33,428	34,904	25,872	24,842	23,932	22,903	28,096	28,733
<u>Financing Activities</u>											
Change in Securities Held as Customer Deposits	(51)	(217)	(695)	(90)	(88)	(96)	(123)	(536)	(171)	(184)	(180)
Change in Customer Deposits	51	217	695	90	88	96	123	536	171	184	180
Change in Current Portion of L-T Debt	821	222	1,094	1,387	1,455	1,129	758	1,087	1,289	737	(725)
Change in L-T Debt	(2,944)	6,876	5,783	9,396	7,940	6,811	1,054	(34)	(1,323)	(2,060)	(1,335)
Change in S/H Note Payable	-	(0)	0	-	-	-	-	-	-	-	-
Deferred Revenue	15,682	15,025	21,560	10,997	15,709	9,095	9,280	7,100	7,245	12,430	12,674
Net Cash Provided by Financing Activities	13,559	22,122	28,437	21,780	25,105	17,035	11,091	8,154	7,211	11,107	10,614
Increase (decrease) in Cash & Cash Equivalents	1,383	1,119	284	3,402	4,969	5,750	1,103	2,698	5,213	4,982	4,933
Cash & Cash Equivalents, Beginning of Year	5,246	4,554	2,926	1,040	589	2,159	4,869	3,163	2,959	2,759	1,966
Dividends Paid to BEC	(2,076)	(2,747)	(2,170)	(3,853)	(3,399)	(3,040)	(2,809)	(2,903)	(5,413)	(5,776)	(6,215)
Cash & Cash Equivalents, End of Year	4,554	2,926	1,040	589	2,159	4,869	3,163	2,959	2,759	1,966	684

BURLINGTON HYDRO INC.	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2024
STATEMENT of COMPREHENSIVE INCOME (\$000s)	<u>Update</u>	<u>Budget</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Budget</u>
TOTAL REVENUE	226,946	232,515	245,651	250,799	256,004	261,400	267,229	278,652	285,290	292,194	299,134	231,952
-: Cost of Power Purchased	189,840	193,637	197,510	201,460	205,489	209,599	213,791	218,067	222,428	226,877	231,415	195,132
DISTRIBUTION REVENUE	37,106	38,878	48,141	49,339	50,515	51,801	53,438	60,585	62,862	65,317	67,719	36,820
<u>Other Operating Revenue</u>												
Late Payment Charges	210	217	269	275	282	289	298	338	351	365	378	220
Carrying Charges on Regulatory Balances	378	100	100	100	100	100	100	100	100	100	100	100
BESI Billing Service Revenue	452	489	501	513	524	536	548	560	572	584	596	451
Deferred Revenue - amort. of Contr.Capital	1,598	1,959	2,376	2,563	2,850	2,986	3,123	3,209	3,297	3,496	3,696	1,810
Miscellaneous	1,818	1,183	1,325	1,333	1,342	1,353	1,372	1,396	1,424	1,455	1,483	993
	4,456	3,948	4,571	4,784	5,098	5,264	5,441	5,603	5,744	6,000	6,253	3,574
<u>Operating Expenses</u>												
Operations & Maintenance	11,625	12,795	13,703	14,182	14,679	15,192	15,724	16,275	16,844	17,434	18,044	11,524
Billing & Collection	3,065	3,262	3,429	3,549	3,673	3,802	3,935	4,072	4,215	4,362	4,515	3,119
General Administration	10,220	11,286	12,673	13,117	13,576	14,051	14,543	15,052	15,579	16,124	16,689	9,685
Municipal Tax	339	349	359	372	385	398	412	427	442	457	473	372
Depreciation & Amortization	8,688	9,323	10,179	10,994	11,740	12,214	12,622	13,023	13,361	13,798	14,243	8,966
TOTAL EXPENSES	33,937	37,014	40,343	42,214	44,053	45,657	47,236	48,849	50,441	52,176	53,964	33,665
INCOME FROM OPERATING ACTIVITIES	7,625	5,812	12,369	11,909	11,561	11,408	11,643	17,340	18,165	19,141	20,009	6,728
Interest Expense - short term debt	72	72	72	72	72	72	72	72	72	72	72	72
Interest Expense - long term debt	551	989	1,342	1,914	2,424	2,864	2,999	3,082	3,117	3,092	3,013	856
Interest Expense - Shareholder Note	1,365	1,365	2,193	2,193	2,193	2,193	2,193	2,193	2,193	2,193	2,193	1,365
Interest Expense	1,988	2,425	3,607	4,179	4,688	5,129	5,264	5,347	5,382	5,357	5,278	2,293
Interest Income	546	123	109	90	101	141	152	127	156	148	125	153
Net Finance Costs	1,442	2,302	3,498	4,089	4,587	4,988	5,112	5,221	5,226	5,209	5,153	2,140
INCOME BEFORE INCOME TAXES	6,183	3,510	8,871	7,820	6,973	6,420	6,531	12,119	12,939	13,932	14,855	4,588
Income Taxes	711	404	1,020	899	802	738	751	1,394	1,488	1,602	1,708	528
TOTAL COMPREHENSIVE INCOME	5,472	3,106	7,850	6,921	6,171	5,682	5,780	10,726	11,451	12,330	13,147	4,060

BURLINGTON HYDRO INC. CAPITAL BUDGET (\$000s)	2024 <u>Update</u>	2025 <u>Budget</u>	2026 <u>Fcst</u>	2027 <u>Fcst</u>	2028 <u>Fcst</u>	2029 <u>Fcst</u>	2030 <u>Fcst</u>	2031 <u>Fcst</u>	2032 <u>Fcst</u>	2033 <u>Fcst</u>	2034 <u>Fcst</u>	2024 <u>Budget</u>
<u>NET CAPITAL BUDGET</u>												
Buildings	805	232	839	524	550	310	270	405	255	255	255	195
Land Rights	-	-	-	-	-	-	-	-	-	-	-	-
H1 CCRA True-up (Tremaine & Bronte TS)	-	223	-	-	-	-	-	-	-	-	-	-
Tremaine TS Breakers	-	-	-	-	-	-	-	-	-	-	-	-
Substation Equipment	1,283	1,295	1,515	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,530
Projects - Overhead and Underground	6,411	10,094	11,948	9,106	8,725	8,225	8,125	8,325	8,225	7,925	7,925	6,486
Transformers	1,164	812	812	811	811	811	811	811	811	811	811	811
Meters	1,946	1,626	4,117	4,001	3,670	1,936	1,910	2,501	1,549	1,563	1,577	1,826
Rolling Stock	410	950	1,011	876	702	633	242	227	162	187	237	455
Tools	29	20	20	20	20	20	20	20	20	20	20	20
Computer Hardware/Software	1,248	652	639	4,021	1,421	1,386	521	467	421	421	421	1,132
Office Equipment	-	20	20	45	28	20	32	28	20	20	28	20
	13,298	15,923	20,920	20,869	17,392	14,806	13,396	14,249	12,928	12,667	12,738	12,475
Developer Asset BuyBacks	735	735	735	700	700	700	700	700	700	700	700	450
NET CAPITAL BUDGET	14,033	16,658	21,655	21,569	18,092	15,506	14,096	14,949	13,628	13,367	13,438	12,925
<u>CAPITAL CONTRIBUTIONS</u>												
General Service Projects	13,682	13,025	19,137	8,574	12,806	6,406	6,406	4,306	4,306	8,606	8,606	14,374
Developer Assets Assumed	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
CAPITAL CONTRIBUTIONS	15,682	15,025	21,137	10,574	14,806	8,406	8,406	6,306	6,306	10,606	10,606	16,374
TOTAL CAPITAL BUDGET	29,714	31,683	42,792	32,142	32,898	23,912	22,502	21,254	19,934	23,973	24,044	29,299
<u>INFLATION ADJUSTED CAPITAL BUDGET</u>												
Sustaining Capital Budget Inflation Adj.	14,033	16,658	22,088	22,431	19,195	16,777	15,562	16,832	15,658	15,666	16,059	12,925
Capital Contributions Inflation Adj.	15,682	15,025	21,560	10,997	15,709	9,095	9,280	7,100	7,245	12,430	12,674	16,374
TOTAL INFLATION ADJ. CAPITAL BUDGET	29,714	31,683	43,648	33,428	34,904	25,872	24,842	23,932	22,903	28,096	28,733	29,299

BURLINGTON HYDRO INC.
DIVIDENDS (\$000's)

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	<u>Update</u>	<u>Budget</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>	<u>Fcst</u>
31-Mar True-up Prior Year	184	912	333	2,136	1,682	1,323	1,093	1,186	3,696	4,059	4,498
31-Mar Working Capital for BEC	50	50	50	50	50	50	50	50	50	50	50
31-Mar - Regular Payment	417	417	417	417	417	417	417	417	417	417	417
30-Jun - Regular Payment	417	417	417	417	417	417	417	417	417	417	417
30-Sep - Regular Payment	417	417	417	417	417	417	417	417	417	417	417
31-Dec - Regular Payment	417	417	417	417	417	417	417	417	417	417	417
Sub-Total Regular Dividends	1,902	2,629	2,050	3,853	3,399	3,040	2,809	2,903	5,413	5,776	6,215
Special Dividend	-	-	-	-	-	-	-	-	-	-	-
Cap Study - Special Dividend	58	-	-	-	-	-	-	-	-	-	-
Forestry Lease - Special Dividend	116	118	120	-	-	-	-	-	-	-	-
Total Dividends Declared/Paid to BEC	2,076	2,747	2,170	3,853	3,399	3,040	2,809	2,903	5,413	5,776	6,215