

CAPITAL BUDGET – SUPPORT SERVICES

1.0 PURPOSE

This evidence provides an overview of the capital expenditures by OPG's Support Services groups for the historical years (2020-2024), bridge years (2025-2026), and the IR term (2027-2031). It also sets out period-over-period changes in these expenditures.

2.0 OVERVIEW

Exhibit D3-1-1, Table 1 sets out capital expenditures by OPG's Support Services groups that impact rate base or the asset service fees. The Support Services capital expenditures for real estate and information technology ("IT") for the regulated facilities are delivered by the Real Estate ("RE") and Digital Technology & Services ("DTS") groups respectively within the Corporate Services business unit.

OPG's role in meeting the demand for energy in Ontario, including the advancement of the Pickering Refurbishment Program ("PRP"), Pickering's "second-life" operations, the development of the Darlington New Nuclear Program ("DNNP") and the expanded hydroelectric work program, are necessitating new IT and real estate capital work. The Support Services capital expenditures budget for the IR term reflects this growing demand in a dynamic business environment, including a changing IT landscape. These investments will need to be delivered to meet current requirements while meeting the objectives of the Company's longer-term digital strategy and considering the impact on the Company's real estate footprint. An overview of IT and RE capital investments over the historical, bridge and IR term is provided in this exhibit.

As shown in Chart 1, the total OPG capital expenditures for Support Services projects over the IR term total \$1,073.3M. The annual expenditure will decline over the IR term, starting at \$313.0M in 2027 and reducing to \$159.0M in 2031. Capital expenditures for IT projects account for about 75% of the total Support Services capital portfolio over the IR term, with an average expenditure of \$161.5M per year, beginning at \$210.6M in 2027 and reducing to \$127.8M by 2031. Excluding non-portfolio investments in the Corporate Headquarters ("CHQ"), the

1 Enterprise System Modernization portfolio and the DNNP Operational Readiness Technology
 2 Projects, the Support Services sustaining portfolio capital expenditures of \$698.1M for the IR
 3 term is substantially the same as the currently forecast 2022-2026 period expenditures of
 4 \$718.4M. Explanations of the term over term and period over period changes are provided in
 5 Section 4.0.

6
 7

Chart 1 – Support Services Capital Expenditures (\$M)

Line No.	Category	2027 Plan	2028 Plan	2029 Plan	2030 Plan	2031 Plan	2027- 2031 Plan
		(a)	(b)	(c)	(d)	(e)	(f)
	Project Portfolios:						
1	IT	77.1	88.2	92.9	91.6	82.3	432.1
2	Real Estate	102.4	41.8	42.9	47.7	31.2	265.9
3	Total Project Portfolio	179.5	130.0	135.8	139.3	113.5	698.1
4	Enterprise System Modernization	104.8	61.7	43.7	44.3	39.8	294.2
5	DNNP Operational Readiness Technology Projects	28.7	22.4	16.6	7.5	5.8	81.0
6	Total Support Services Capital Expenditures	313.0	214.1	196.0	191.1	159.0	1,073.3

8

9 As capital projects are completed, the resulting assets are placed in-service. Details on in-
 10 service additions are provided in Ex. D3-1-2, Tables 1-5. Where the assets can be directly
 11 assigned, they are declared as in-service additions to the rate base for the respective business
 12 units. OPG’s fixed and intangible assets to be used exclusively or near exclusively for the
 13 DNNP facilities are not included in OPG or DNNP LP’s rate base or associated depreciation
 14 and amortization expense component of the revenue requirement. If the assets cannot be

1 directly assigned¹ because they are used by multiple groups, they are held centrally, and the
2 regulated businesses are charged an asset service fee for their use. Additionally, in-service for
3 projects to be used exclusively or near exclusively for the DNNP facilities are not included in
4 OPG or DNNP LP's rate base and, instead, are expected to be charged to DNNP LP through
5 an asset service fee under the respective agreement between the parties. Asset service fees
6 are further discussed in Ex. F3-2-1.

8 **3.0 CAPITAL EXPENDITURES**

9 Exhibit D3-1-1, Tables 1 and 2 present the actual and forecasted Support Services capital
10 expenditures for the period 2020-2031. These expenditures represent the sum of the following,
11 as categorized in these tables:

- 12 • **Portfolio Projects:** Project portfolios are developed and tailored to ensure the safety and
13 reliability of OPG's assets, meet regulatory requirements, sustain or optimize performance,
14 and address issues of obsolescence. The Support Services project portfolio consists of the
15 following:
 - 16 ○ **IT:** Planned technology capital expenditures over the IR term were developed with
17 approximately half the expenditures targeting on-going cyber security investments,
18 emerging regulatory compliance (e.g., Federal Bill C-8), and system sustainment. The
19 remaining portion of the portfolio includes technology investments in areas that will
20 directly support nuclear and hydroelectric operations and are key to maintaining and
21 improving operational reliability and safety. For more information on IT Portfolio
22 Projects, refer to Section 3.1.1.
 - 23 ○ **Real Estate:** OPG operates facilities across the province, and its real estate capital
24 portfolio is designed to support the Company's evolving needs while optimizing real
25 estate costs. For more information on Real Estate portfolio projects, refer to Section
26 3.2.
- 27 • **Non-Portfolio Projects:** Non-portfolio capital expenditures for Support Services are
28 organized as either standalone portfolios for significant investment programs covering a

¹ The ASF methodology considers that to the extent that 90% or more of the beneficial use of a joint-use asset relates to a particular business, the related assets are fully attributed to that business. For a regulated business, this means that such assets are included in the rate base.

1 number of related IT systems or extraordinary projects and are managed separately from
2 the capital portfolio budgets. The reasons for treating a program/project as non-portfolio
3 include its size relative to the overall portfolio whereby both the non-portfolio project(s) and
4 the portfolio budgets are more effectively identified separately. The non-portfolio
5 investments over the bridge and IR term include the following:

- 6 ○ **DNNP Operational Readiness Technology Projects:** Refer to Section 3.1.2
- 7 ○ **Enterprise System Modernization:** Refer to Section 3.1.3
- 8 ○ **Clarington Campus and CHQ:** Refer to Section 3.2

9
10 Project categories are further subdivided in the tables as follows:

- 11 • Allocated projects are those in the planning, execution, or closeout phases (refer to Ex.
12 D2-1-1, Section 3.1) and have an approved Business Case Summary (“BCS”). The
13 approved BCS for these projects can vary from a very preliminary development estimate
14 (e.g., Class 5 estimate) to an Execution BCS (e.g., Class 3 or better estimate).
- 15 • Unallocated projects are those in the project identification or initiation phase (as described
16 in Ex. D2-1-1, Section 3.2). Unallocated amounts reflect the difference between the total
17 approved capital budget and the amount of capital allocated to projects in the respective
18 category. The unallocated amount represents the amount of approved capital and amounts
19 reflected in OPG’s approved business plan that remains available to undertake projects
20 currently at the project identification or initiation phases, until those projects move forward
21 with an approved budget and BCS. Due to the volume of Support Services projects
22 projected to be under \$10M, OPG has provided the list of unallocated Tier 1 (>\$30M) and
23 Tier 2 (\$10M-\$30M) projects in Ex. D3-1-2, Table 6. OPG expects that during the forecast
24 period some of these projects (or other projects yet to be identified) will move from the
25 project identification and initiation phases into the project planning and execution phase as
26 part of the ongoing portfolio management process (Ex. D2-1-1, Section 3.1).

27
28 All projects, both allocated and unallocated, have been reviewed and approved to be entered
29 into OPG’s business plan in alignment with its asset management and investment planning
30 processes (Ex. D2-1-1, Section 3.2). Further details on Tier 1 capital projects are provided in
31 Ex. D3-1-2, Table 1 and Tier 2 capital projects are listed in Ex. D3-1-2, Tables 2a-2e.

1 **3.1 Information Technology**

2 Technology continues to play a critical role in the execution of OPG's planned major capital
3 programs and the strong operational performance of the fleet. In EB-2020-0290, OPG's
4 technology focus was on sustaining core systems and cyber security compliance during a
5 period of cost structure realignment in view of the then anticipated Pickering closure. OPG's
6 current digital strategy builds on these foundations and guides the Company's plans and
7 priorities for technology investments in support of OPG's mandate. OPG's 2024-2028 Digital
8 Business Strategy Roadmap ("Roadmap") is provided as Attachment 1 to this schedule,
9 reflecting a natural evolution from maintaining reliability to enabling a more integrated and
10 adaptive digital environment. While the digital strategy continues to address the refresh of IT
11 systems according to their lifecycle, it also directs investments in enhanced technologies to
12 support OPG's ongoing and future operational requirements. This includes investments in
13 operational readiness technology for the DNNP facilities and an Enterprise System
14 Modernization portfolio, further discussed in Sections 3.1.2 and 3.1.3, respectively.

15
16 OPG's digital strategy focuses on three areas:

- 17 1. Support Growth of the business;
- 18 2. Enable Core Business functions to operate efficiently and effectively; and
- 19 3. Manage OPG's Technology Foundation, including product lifecycle upgrades.

20
21 The "Support Growth" pillar of the strategy focuses on providing innovative solutions and
22 initiatives to OPG's growth areas and large-scale projects such as the DNNP. This includes
23 implementing digital solutions necessary for the DNNP to meet its operating model
24 requirements.

25
26 The goal of the "Enable Core Business" pillar is to optimize the effectiveness of current
27 business processes and systems by identifying industry best practice, re-engineering
28 processes to fit with new technology solutions, and modernizing technology to ensure robust
29 cyber security. Process re-engineering will also set up the required foundation to capture and
30 manage data required to drive automation, including leveraging technologies such as Artificial
31 Intelligence ("AI").

1 The “Manage OPG’s Technology Foundation” pillar focuses on upgrades to infrastructure that
2 digitally connects OPG’s stations, investments in new cyber security solutions, AI, and data
3 platforms, along with a set of investments in OPG’s IT capabilities to meet resilience and
4 performance requirements. This includes “right-sized”, proactively planned projects to manage
5 end-of-life systems with scalable replacements and/or upgraded technology. The continued
6 maturation of project delivery, including change management, is also a focus of the strategy
7 to ensure the technology is well-adopted in order to realize its intended outcomes.

8
9 OPG’s Digital Roadmap lays out a series of sequentially timed investments aimed at ensuring
10 the technology investments align with corporate objectives, regulatory obligations, and
11 evolving external conditions, through to the end of the IR term. This directional roadmap is
12 designed with the goal of maintaining the reliability, security, and performance of core systems
13 while having the flexibility to respond to emerging risks and opportunities over the IR term.

14
15 External factors, such as cyber security threats, industry trends and regulatory changes, play
16 a critical role in shaping technology adoption and investment decisions over the IR term. These
17 factors are continuously monitored and assessed to inform strategic technology planning and
18 system architecture. For example, the increasing frequency and sophistication of cyber threats
19 such as the use of AI in cyber-attacks, necessitate ongoing investment in security infrastructure
20 and protocols. Similarly, investments are earmarked to address regulatory changes that are
21 expected to require enhancements to data management systems to ensure compliance with
22 new reporting standards.

23
24 Furthermore, the pace of technological innovation requires OPG to adapt and to be responsive
25 to technological disruptions and new opportunities that support business requirements. This
26 can be enabled by selecting platforms with modular design² and open architecture³ that can
27 adapt to and integrate with new tools and services. OPG’s goal is to ensure that its IT project
28 portfolio remains resilient and capable of supporting future operational and regulatory

² Modular system design enables parts of the system to be added, removed, or replaced independently, which makes systems easier to maintain, upgrade, and scale.

³ Open architecture enables one system to work with, or integrate more easily, with other systems.

1 requirements within this constantly changing landscape so that the value of technology
2 investments can persist over the longer term, where possible.

3
4 With a diverse technology ecosystem, OPG has many different technologies and platforms. In
5 conjunction with the processes outlined in Ex. D2-1-1, DTS utilizes the Gartner TIME
6 framework (defined below) to examine and validate technology solutions for technical and
7 functional fit and to ensure additional technologies and platforms are appropriate to the
8 ecosystem. The framework enables OPG to categorize a potential investment into one of four
9 groups: Tolerate, Invest, Migrate, or Eliminate. This practice helps to ensure that decisions
10 continue to be based on operational requirements and architecture standards, and to identify
11 and address risks associated with system obsolescence or ongoing support. The framework
12 is incorporated into project prioritization and review cycles and informs decisions on upgrades
13 and retirements of existing technologies.

14 15 3.1.1 IT Projects Portfolio

16 Since EB-2020-0290, cyber security investments continue to be an important part of the IT
17 portfolio, and significant investments have been made to protect OPG's digital and physical
18 infrastructure and assets, as well as to comply with new regulatory requirements. Additionally,
19 there continues to be a need to address risks associated with aging IT infrastructure, and the
20 emergence of new data and AI capabilities as new and updated technology is introduced to
21 OPG's technology ecosystem.

22
23 OPG is also adapting to an evolving IT services marketplace. As the IT industry continues to
24 move away from older on-premise systems to more cloud-based software, system
25 obsolescence is a continued risk over the IR term. Vendors continue to move towards cloud-
26 based solutions, and some, such as SAP, will soon discontinue their support for existing
27 platforms. These evolving services also result in new opportunities and benefits. New cloud-
28 based tools deliver improved automation and significant advancements in data analytics, and
29 AI is increasingly being integrated into systems. In addition to improving system reliability and
30 reducing maintenance needs, transitioning to cloud software also offers benefits such as
31 enhanced scalability, improved system resilience, reduced reliance on physical infrastructure

1 as well as access to advanced security and compliance tools. To appropriately plan for these
2 IT investments, the portfolio includes estimates for planning the migration strategy, defining
3 business requirements, streamlining processes, securely transferring data, integrating legacy
4 systems with cloud platforms, and training staff to operate in the new environment. These steps
5 will help to ensure a smooth transition, minimize operational disruption, and maximize the value
6 of the new technology.

7
8 System obsolescence is a risk to OPG's continued safe and reliable operations. Planned
9 expenditures to mitigate this risk include updating technology platforms, upgrading core
10 systems and replacing obsolete technology to address the obsolescence of core systems and
11 to improve business functionality. A key initiative is to upgrade and update OPG's core systems
12 through an Enterprise System Modernization portfolio for Enterprise Resource Planning
13 ("ERP") and Enterprise Asset Management ("EAM") systems, further discussed in Section
14 3.1.3. The IT portfolio also includes investments for operational technology such as the
15 modernization of all primary Niagara River Control Center/International Niagara Control Works
16 applications to replace obsolete technologies and the modernization of the nuclear Site
17 Condition Record platform.

18
19 OPG is currently tracking about 350 project demands over the IR term. The IT portfolio aims
20 to enable OPG to be agile to respond to changes in technology developments and needs while
21 being separate from the non-portfolio investments further discussed in Sections 3.1.2 and
22 3.1.3. OPG will continue to review and manage the project portfolio to prioritize projects for
23 advancing to execution and respond with flexibility as the technology landscape and OPG's
24 business requirements evolve, ultimately reducing the unallocated portfolio to zero over the IR
25 term.

26 27 3.1.2 DNNP Operational Readiness Technology Projects

28 OPG is investing in digital technologies to ensure operational readiness for the DNNP facility.
29 As a newly built asset, the DNNP facility provides an opportunity to design and integrate a
30 modern suite of technology from the start, efficiently addressing operational needs and taking
31 advantage of modular design and open architecture for the core systems. In 2023, OPG

1 undertook a comprehensive request for proposal process to select an EAM solution system for
2 managing the lifecycle of physical assets for the DNNP facility. The SAP S/4HANA solution
3 was selected based on the system's ability to deliver a streamlined, automated approach to
4 asset management. The platform offers advanced capabilities that are expected to provide the
5 necessary asset performance and ensure compliance with regulatory standards.

6
7 Additionally, this portfolio includes other technologies to support functions such as engineering
8 modeling and the digitalization of plant operations, as well as tools for areas such as work
9 protection, chemistry and radiation protection. This new suite of technology and systems will
10 support the DNNP facilities' distinct operating model, including a streamlined workforce plan.
11 These technologies are a prerequisite for operating the assets safely, reliably, efficiently and
12 in compliance with regulatory requirements when Unit 1 comes online in 2030.

13
14 Planned expenditures for DNNP Operational Readiness Technology Projects are \$151.8M
15 from 2025-2031 including \$81.0M through the IR term. This includes \$68.7M for the DNNP
16 EAM project discussed further in Ex. D3-1-2, Section 3.3, with the remaining expenditures for
17 the unallocated operational technology investments described above. Capital expenditures for
18 these projects are included in Ex. D3-1-1, Tables 1 and 2, and in-service amounts are shown
19 in Ex. D3-1-2, Table 4.

20 21 3.1.3 OPG Enterprise System Modernization Portfolio (ERP and EAM)

22 A critical investment within the IR term is the broader modernization of OPG's ERP and EAM
23 systems, driven by system obsolescence and evolving business needs. This modernization is
24 expected to update core finance, supply chain and asset management systems and
25 processes, consistent with the configuration of the technology to OPG's requirements. This
26 holistic approach to systems and processes is expected to improve data integrity and
27 cross-functional integration, and deliver improvements in service delivery, productivity, and
28 cost control across the Company. As the sequence of the projects progress, OPG will leverage
29 lessons learned from earlier projects including the DNNP EAM project. These projects
30 collectively represent an investment of \$294.2M over the IR term to modernize all three core
31 systems of Finance ERP, Supply Chain ERP, as well as OPG's EAM systems and processes

1 for the Renewable Generation (“RG”) and Nuclear fleets. These projects are shown in Ex. D3-
2 1-1, Tables 1 and 2 as part of the Enterprise System Modernization portfolio.

3
4 In addition to addressing obsolescence risk, the investment in updated technology is expected
5 to facilitate improvements in several areas of operational effectiveness. These include
6 functions that are essential to OPG’s day-to-day operations and ongoing project planning and
7 execution. Once the modernization is complete and process changes have matured, the
8 modernization is expected to improve overall data integration, asset management lifecycles,
9 procurement processes, financial controls, and reporting capabilities. OPG is at varying stages
10 of each project, with Finance ERP the first OPG-wide project to enter the execution phase (see
11 Ex. D3-1-2, Section 3.3).

12
13 A modernization of this scale has inherent risks, and in determining the Enterprise System
14 Modernization portfolio timeline and planning, OPG will consider project risks such as the
15 potential for operational disruption and the need for business subject matter expertise where
16 appropriate. Change management and resourcing risks will be mitigated through appropriate
17 project planning and a phased implementation approach that first prioritizes the systems that
18 are directly impacted by obsolescence. This phased approach will enable OPG to learn and
19 address opportunities for improvement before initiating the next implementation. The three
20 company-wide Enterprise System Modernization portfolio projects are discussed below. These
21 assumptions, where applicable within the IR term, are also reflected in Support Services OM&A
22 costs discussed in Ex. F3-1-1 and Ex. F3-1-2.

23
24 Planned capital expenditures for the Enterprise System Modernization portfolio are \$364.8M
25 from 2025-2031 including \$294.2M through the IR term (Ex. D3-1-1, Table 1). This includes
26 \$118.6M for the Finance ERP project, an allocated project, with the remaining expenditures
27 for the unallocated projects, Supply Chain ERP and Enterprise Asset Management (Ex. D3-1-
28 2, Table 1). The three projects are discussed in greater detail below.

1 **Finance ERP**

2 Currently, financial operations at OPG are supported by a customized SAP system that
3 manages activities such as business planning, reporting, consolidation, and financial
4 performance analysis. The current SAP system is approaching the end of its lifecycle, with
5 support scheduled to end in 2027.

6

7 The sustaining project upgrade of the ERP system to SAP S/4HANA will mitigate the risk of an
8 otherwise under supported system which would require significant ongoing system patchwork
9 and maintenance. As a cloud-based platform, the upgraded system is expected to provide
10 improved functionality and scalability compared to the legacy, on-premise system. It will enable
11 faster implementation timelines, automatic delivery of security updates, as well as the ability
12 to scale system capacity and functionality in response to potential business growth or change.
13 This flexibility is important as OPG's operations become increasingly diverse and complex.

14

15 SAP S/4HANA was selected as the preferred platform based on its proven performance in the
16 utility sector, its ability to support regulatory compliance, and its alignment with OPG's existing
17 SAP ecosystem. Its integrated architecture is expected to simplify system maintenance,
18 reduce change management risks, and enable expansion into other modules as needed. This
19 project is further discussed in Ex. D3-1-2, Section 3.3.

20

21 **Supply Chain ERP**

22 Asset Suite 9 ("AS9") is a legacy enterprise system currently used by OPG to support work
23 management, asset management, and supply chain functions across Nuclear and RG
24 operations, including regulated hydroelectric operations and projects. In 2022, based on the
25 planned shutdown of Pickering, OPG upgraded from Asset Suite 7 ("AS7") to AS9 to avoid
26 technical obsolescence, sustain vendor support and address identified cyber security risks.
27 With the expectation of PRP and increased focus on the renewal of the hydroelectric assets,
28 OPG has reassessed its operational needs and determined that AS9 is approaching the end
29 of its lifecycle. In its current form, AS9 lacks the necessary scalability and functionality required
30 for Supply Chain operations to support OPG's evolving business.

1 OPG is planning a phased transition to a modern ERP solution that will support Supply Chain
2 and RG operations in 2029, followed by Nuclear operations in 2031. The specific technology
3 platform has not yet been selected. The investment strategy for the replacement includes
4 planning and requirements gathering, system licensing, integration activities, and
5 comprehensive change management to minimize operational disruption. In selecting the
6 preferred solution, OPG will assess the long-term operational reliability and functionality of
7 candidate systems. A modern ERP platform is expected to strengthen demand forecasting,
8 inventory optimization and supply chain responsiveness, streamline workflows and improve
9 integration with other enterprise platforms.

10
11 OPG expects to progress this project on a timeline that balances operational impacts while
12 addressing the business needs and managing the risk associated with vendor support for the
13 current platform.

14 15 **Enterprise Asset Management (“EAM”)**

16 Enterprise Asset Management systems are specialized for managing the lifecycle of physical
17 assets from acquisition through to maintenance and finally to end of life. The selection process
18 for the DNNP facilities’ EAM discussed in Section 3.1.2 helped OPG to identify potential vendor
19 solutions that can meet the operational requirements for its broader nuclear and regulated
20 hydroelectric operations, including compatibility with the SAP S/4 HANA Finance ERP system
21 and further requirements for scalability, user experience and vendor support.

22
23 As discussed above, OPG’s current asset management system, AS9 is approaching the end
24 of its lifecycle and will no longer meet the needs of OPG’s fleet. By updating OPG’s asset
25 management and resource planning systems and associated processes in an integrated
26 manner, OPG expects to simplify systems and overall system architecture, eliminating system
27 silos and ensuring processes are interconnected. Real-time insights across systems and
28 processes are expected to enable OPG to respond to operational requirements more readily
29 than can be done through unintegrated systems. The transition and associated integration will
30 require careful project planning and risk management to minimize potential operational
31 disruption.

1 OPG's Enterprise System Modernization is expected to ensure continued reliable operations,
2 effective cyber security, and greater certainty in planning for technology maintenance costs
3 over the longer term.

4 5 3.1.4 Microsoft Enterprise Agreement

6 In 2017, OPG entered into an Enterprise Agreement with Microsoft ("Microsoft Enterprise
7 Agreement"), which allows OPG to obtain per-user software licenses for Microsoft E5. This
8 model allowed OPG to shift away from the purchase and implementation of individual software
9 as it became obsolete to enter into term agreements with Microsoft. As such, OPG has been
10 renegotiating and renewing its agreement with Microsoft every three years. In EB-2020-0290,
11 for the 2022-2026 IR term, qualifying costs associated with the planned subsequent renewals
12 in 2023 and 2026 of the Microsoft Enterprise Agreement formed part of OPG's capital
13 expenditure and in-service amounts (OEB-approved columns of Ex. D3-1-1, Table 2; Ex. D3-
14 1-2, Tables 5a and 5b).⁴

15
16 Given the additional guidance on cloud computing software arrangements under a US GAAP
17 accounting standards update that was issued and effective for periods beginning January 1,
18 2020, the agreement terms and conditions were reviewed in detail and it was noted that the
19 Microsoft E5 software license hosting costs did not meet the criteria to be recognized as capital
20 expenditures (Ex. D4-1-1). As such, for renewals and related costs incurred during the 2022-
21 2026 period, these amounts were recorded as OM&A costs. For the IR term, the costs are
22 included as OM&A software costs in Ex. F3-1-1, Tables 4-6.

23 24 **3.2 REAL ESTATE ("RE")**

25 OPG's generating stations, facilities and offices are located across the province, and its real
26 estate capital portfolio is developed to meet the Company's evolving needs while seeking to
27 optimize overall real estate costs. RE capital expenditures in the IR term total \$265.9M
28 compared to \$212.8M in the 2022-2026 period (excluding the CHQ). After the 2027 peak of
29 capital expenditures for certain identified operational enablement projects discussed below,

⁴ EB-2020-0290, Ex. D3-1-1, section 2.1.1.

1 the average annual expenditure from 2028-2031 will reduce to \$40.9M compared to the
2 average annual expenditure of \$42.6M in the 2022-2026 period.

3
4 To streamline OPG's real estate workspace cost structure, RE will continue to focus on the
5 optimization of the overall workspace footprint for OPG's existing sites and facilities by
6 transforming office layouts and leveraging its CHQ in Oshawa, Ontario, which became
7 operational in 2025. Since EB-2020-0290, OPG has executed plans to optimize the overall
8 corporate real estate footprint of its office space. By the end of 2025, OPG will have achieved
9 nearly a 30% reduction of its square foot per full-time equivalent ("FTE") (from approximately
10 315 square feet per FTE to approximately 225 square feet per FTE). OPG is planning to further
11 optimize the overall real estate footprint of its office space to approximately 200 square feet
12 per FTE by the end of 2031. This will be accomplished by managing leases and continuing to
13 invest in workplace optimization projects to enable effective utilization of workspaces and.
14 These Tier 2 workplace transformation projects are listed in Ex. D3-1-2, Tables 2a-2d.

15
16 Real estate and facilities optimization is achieved by planning and designing with flexibility.
17 Real Estate regularly reviews projects and project demand through the business planning
18 process and seeks to adapt to emerging business requirements as needed (as discussed in
19 Ex. D3-1-2). While RE does not maintain an explicit unallocated portfolio of projects due to the
20 relatively small size of its capital program, it otherwise follows the principles of the investment
21 planning process outlined in Ex. D2-1-2 and adjusts the plan as new projects are identified and
22 managed within the portfolio budget. This may result in the deferral, cancelling or adding of
23 projects to respond to evolving and emerging business needs.

24
25 The Ontario government's approval for the extended operation of Pickering Units 5-8 to
26 September 2026 and OPG's plan to refurbish Units 5-8 at Pickering have resulted in
27 incremental capital projects to address infrastructure deficiencies, optimize the associated
28 corporate real estate facilities and maintain the site for a lifecycle that can be extended to
29 Pickering second-life operations. In EB-2020-0290, these projects were not identified due to
30 the planned Pickering closure in 2025 are described in Section 5.2.

1 **Corporate Headquarters (“CHQ”)**

2 In EB-2020-0290, OPG proposed to build the Clarington Corporate Campus at an estimated
3 cost of \$200M, which in combination with the DEC would allow OPG to have a corporate head
4 office. In 2022, a renewed assessment of building costs was completed, which indicated that
5 costs to complete the project would be higher than the original estimate given the inflationary
6 and supply chain pressures following the COVID-19 pandemic (further discussed in Ex. D3-1-
7 2, Section 3.3). At that time, the land and building at 1908 Colonel Sam Drive in Oshawa
8 became available for purchase. OPG made the decision to move away from constructing a
9 new building, to instead purchase and renovate the 1908 Colonel Sam Drive building to serve
10 as the new OPG headquarters. Excluding undeveloped land, the expenditures for the purchase
11 and renovation of the CHQ was \$190.8M. Located between Pickering and Darlington, the CHQ
12 seeks to increase collaboration while creating a modern long-term office space to meet
13 business needs and realize greater optimization of the corporate real estate footprint.

14
15 **Operational Enablement Projects**

16 The RE capital portfolio includes several notable investments to maintain operational continuity
17 for OPG’s core businesses as described below:

- 18 • To ensure continued training capacity for the Renewable Generation (“RG”) business, OPG
19 will lease and fit out a new Renewable Generation Training Center, as the current lease at
20 800 Kipling Avenue is at risk to cease in 2026. This investment will provide a dedicated
21 hub for technical and safety training for the RG fleet and will necessitate a short period of
22 overlap between leased properties to accommodate the fit-out of the new facility (Ex. D3-
23 1-2, Table 2e).
- 24 • In 2027, OPG will develop a leased centralized warehouse to address growing logistics
25 needs driven by near term major projects such as the PRP and the DNNP, as well as long
26 term operational needs at both Darlington and Pickering sites. By consolidating warehouse
27 capacity and fitting out a single leased property, OPG seeks to mitigate operational risk
28 and avoid inefficiencies associated with fragmented inventory storage solutions and ageing
29 existing facilities. This transition will necessitate a short period of overlap between leased
30 properties to accommodate the fit-out of the new facility (Ex. D3-1-2, Table 2d).

- 1 • OPG will upgrade its electric vehicle (“EV”) charging infrastructure at nuclear and
2 hydroelectric generation sites and support locations to enable fleet electrification. This
3 initiative ensures compliance with evolving regulatory requirements (Ex. D3-1-2, Table 2e).
- 4 • Real Estate is undertaking a security project to address corporate security requirements
5 (Ex. D3-1-2, Table 1).

6 7 **4.0 TERM-OVER-TERM CHANGES**

8 Term-over-term comparisons of capital expenditures by OPG’s Support Services groups are
9 presented in Ex. D3-1-1, Table 2.

10 11 **5.0 TERM-OVER-TERM CHANGES – IR TERM**

12 **2027-2031 Plan versus 2022-2026 Actuals and Budget**

13 The capital expenditures in the IR term of \$1,073.3M are largely consistent with the capital
14 expenditures over the previous five-year period of \$1,050.6M. The increase in capital
15 expenditures of \$22.7M in the IR term is mainly the result of increased expenditures for the
16 advancement of the Enterprise System Modernization program, DNNP Operational Readiness
17 Technology Projects, and RE’s workplace optimization projects, new RG Training Centre, the
18 Central Warehouse project and the CHQ Parking Lot (see Ex. D3-1-2, Table 2d). These
19 increases were largely offset by expenditures on the CHQ in the 2022-2026 period.

20
21 The plan reflects OPG’s investment in the modernization of core technology and real estate
22 assets to address ongoing business needs, support OPG’s major project commitments, drive
23 continuous improvement, and improve long-term resilience and scalability to meet future
24 business needs. These projects include the advancement of enterprise-wide digital tools,
25 investments in operational readiness for the DNNP, sustainment of the Pickering site
26 infrastructure and ensuring effective cybersecurity protection.

27 28 **5.1 PERIOD-OVER-PERIOD CHANGES – BRIDGE YEAR**

29 **2026 Budget versus 2026 OEB-Approved**

30 The increase in capital expenditures of \$162.4M in 2026 Budget compared to 2026 OEB-
31 approved amount is mainly the result of increased expenditures for the advancement of the

1 Digital Strategy and RE projects, which were not included in EB-2020-0290. These include the
2 Finance ERP project and the DNNP Operational Readiness Technology projects described
3 above and in Ex. D3-1-2. The RE expenditures include the retrofit of the assumed newly leased
4 Nuclear Central Warehouse and RG Training Center, and the workplace transformation of the
5 3rd and 2nd Floor at the DEC. The increase in capital expenditures was partly offset by the
6 change in accounting classification for the Microsoft Enterprise Agreement (discussed in
7 Section 3.1.4).

8

9 **2025 Budget versus 2025 OEB-approved**

10 The increase in capital expenditures in the 2025 Budget of \$165.2M compared to 2025 OEB-
11 approved is mainly due to projects that were not planned in EB-2020-0290 to meet regulatory
12 requirements, advance the planning and execution of core technology lifecycle upgrades, and
13 the RE plan. The IT project budget in 2025 includes Finance ERP, DNNP Operational
14 Readiness Technology Projects, and, as part of the IT portfolio, the Energy Market Application
15 Refresh Program due to the Market Renewal program. The RE budget in 2025 includes the
16 CHQ renovation project, Workplace Transformation of DEC 2nd Floor, and the update to
17 Pickering facilities, including changing the HVAC at the Pickering Learning Center and Main
18 Security Building, which were not originally planned in EB-2020-0290 with the expected
19 shutdown of Pickering, and due to these HVAC systems reaching end of life.

20

21 **5.2 PERIOD-OVER-PERIOD CHANGES – HISTORICAL YEARS**

22 **2024 Actual versus 2024 OEB-Approved**

23 The increase in capital expenditures of \$60.1M in 2024 Actual compared to 2024 OEB-
24 approved is mainly attributable to the CHQ renovation project. In 2024, DTS executed more
25 work than was planned in the IT portfolio, including the Enterprise Service Management
26 Project, Energy Market Application Refresh Program, and Enterprise Data Lake Deployment
27 Project. The increase in RE expenditures was due to Pickering related projects being executed
28 to support the infrastructure requirements to operate the site and support the planned
29 refurbishment not contemplated in EB-2020-0290.

1 **2023 Actual versus 2023 OEB-Approved**

2 The increase in capital expenditures of \$29.5M in 2023 Actual compared to 2023 OEB-
3 approved is primarily due to the advancement of the Digital Strategy, the acquisition of the
4 CHQ property⁵ and real estate projects that were not included in EB-2020-0290. In addition to
5 the planned AS9 Upgrade in 2023, DTS initiated and executed the Energy Market Application
6 Refresh Program, Enterprise Data Lake Deployment, and the Enterprise Service Deployment
7 Project as part of the IT portfolio. RE project expenditures included new projects such as the
8 Corporate Headquarters Renovation Project and progressed the update of the Darlington
9 Engineering Support Services Building Floor 2, update of the Darlington Engineering Support
10 Services Building Floor 3 and the Darlington Holt Road Project. The increase in capital
11 expenditures was partly offset by the Clarington Corporate Campus project which was
12 cancelled (Section 3.2), and the updated accounting treatment for the Microsoft Enterprise
13 Agreement (Section 3.1.4).

14
15 **2022 Actual versus 2022 OEB-Approved**

16 The decrease in actual capital expenditures of \$88.8M in 2022 Actual compared to 2022 OEB-
17 approved is mainly due to changes in the RE plan to not proceed with building Clarington
18 Corporate Campus that was included in EB-2020-0290. A renewed assessment of building
19 costs was completed in 2022 which indicated that costs to complete the project would be higher
20 than the original estimate given inflationary and supply chain pressures following the COVID-
21 19 pandemic. It was decided that OPG will not pursue this project (further discussed in Section
22 3.2).

23
24 **2021 Actual versus 2021 OEB-Approved**

25 The increase in actual capital expenditures in 2021 of \$113.5M compared to 2021 OEB-
26 approved in EB-2020-0290 was due to the advancement of the Digital Strategy and RE
27 projects to perform critical infrastructure upgrades at its Darlington and Pickering facilities not
28 planned in EB-2016-0152. DTS's portfolio expenditure included the Re-imagine 2.0 Project,
29 AS9 Upgrade, Data Center Migration Project, Pickering Communication System Improvement,

⁵ Corporate Headquarters includes the cost to acquire the building and associated renovation. The acquisition cost excludes costs associated with undeveloped land.

1 Network Segmentation Project and Energy Market Application Refresh Program, as well as
2 emergent projects such as Enterprise Data Lake Deployment Project, and Equipment Status
3 Monitoring II Project. In RE, the Darlington Holt Road Project, Upgrade of the Pickering
4 Administration Building Workplace Transformation and planned Electric Service Distribution
5 Project were executed.

6

7 **2020 Actual versus 2020 OEB-Approved**

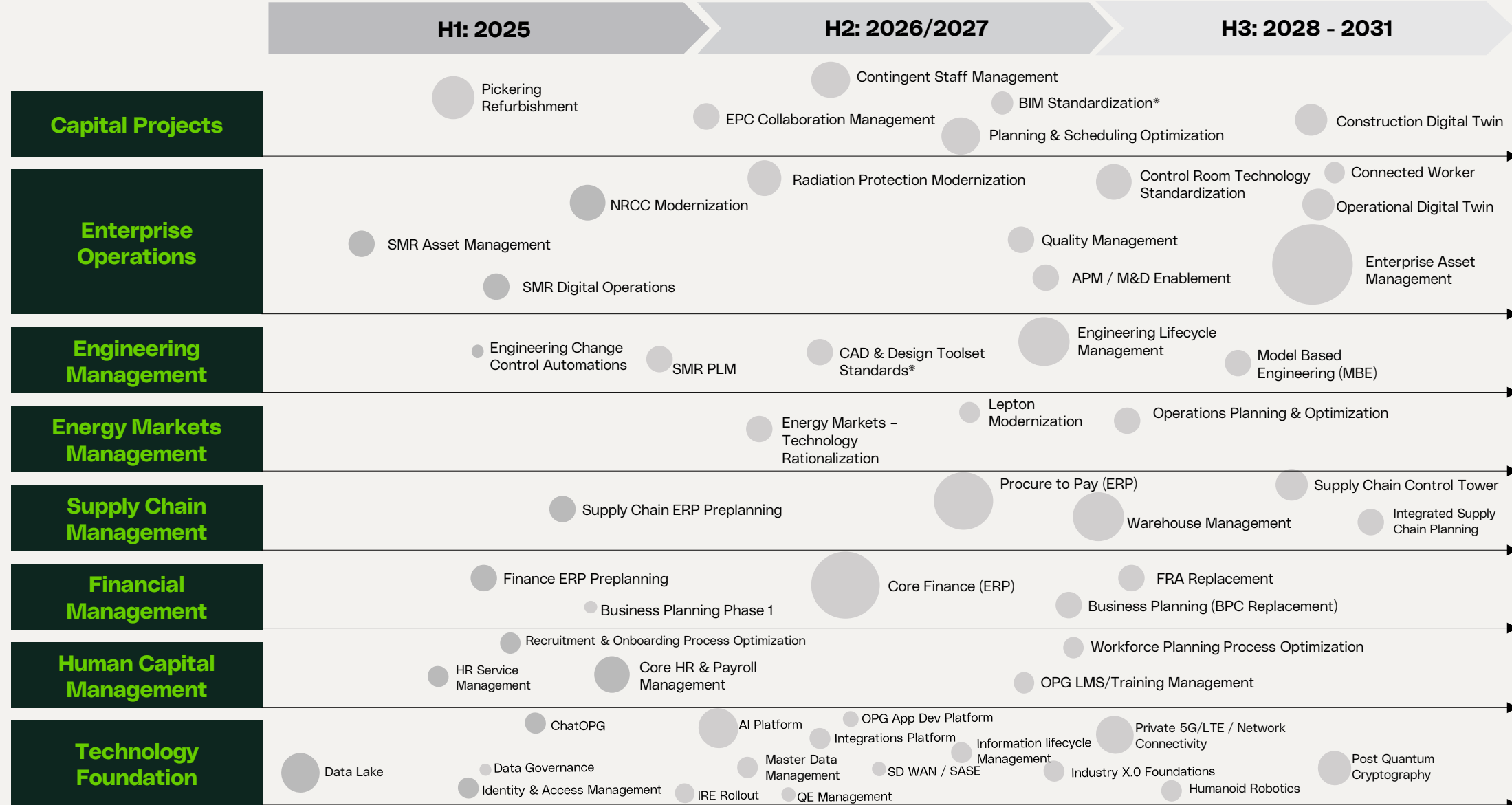
8 The increase in actual capital expenditures in 2020 of \$129.8M compared to 2020 OEB-
9 approved in EB-2016-0152 was due to the advancement of the Digital Strategy and RE
10 projects to perform critical infrastructure upgrades at its Darlington and Pickering facilities not
11 planned in EB-2016-0152. DTS's portfolio expenditure included planned projects such as the
12 AS9 Upgrade, Tempus Lifecycle, Re-imagine Project, Pickering Communication System
13 Improvement, Darlington Wireless Project, Network Segmentation Project, Wireless
14 Improvement Program, Energy Market Application Refresh Program and EAM. In RE, the
15 Electric Service Distribution Project was executed.

1 **LIST OF ATTACHMENTS**

2

3 Attachment 1: OPG's 2024-2028 Technology Roadmap

Enterprise Digital Roadmap * (Directional)



*Roadmap is meant to illustrate a relative level of investment and timing of the investments and may include a single project or a multi-project initiative

Numbers may not add due to rounding.

Updated: 2026-03-10
 EB-2025-0297
 Exhibit D3
 Tab 1
 Schedule 1
 Table 1

Table 1
 Capital Expenditures Summary - Support Services³ (\$M)
 (Capital Expenditures Impacting OPG Rate Base or Asset Service Fees)

Line No.	Support Services	2020 Actual	2021 Actual	2022 Actual	2023 Actual	2024 Actual	2025 Budget	2026 Budget	2027 Plan	2028 Plan	2029 Plan	2030 Plan	2031 Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
1	IT Portfolio¹	101.0	104.6	96.9	116.4	92.7	103.0	96.6	77.1	88.2	92.9	91.6	82.3
2	Real Estate	20.0	24.3	27.9	37.4	34.7	36.1	76.6	102.4	41.8	42.9	47.7	31.2
3	Subtotal	121.0	128.9	124.9	153.8	127.4	139.1	173.2	179.5	130.0	135.8	139.3	113.5
4	Microsoft Enterprise Agreement	23.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Corporate Headquarters²	0.0	0.0	0.0	61.4	44.1	85.3	0.0	0.0	0.0	0.0	0.0	0.0
6	Enterprise System Modernization Projects	0.0	0.0	0.0	0.0	0.0	12.2	58.5	104.8	61.7	43.7	44.3	39.8
7	Subtotal	23.1	0.0	0.0	61.4	44.1	97.5	58.5	104.8	61.7	43.7	44.3	39.8
8	DNNP Operational Readiness Technology Projects (DNNP Asset Service Fee)	0.0	0.0	0.0	0.0	0.0	25.4	45.3	28.7	22.4	16.6	7.5	5.8
9	Total	144.0	128.9	124.9	215.1	171.5	262.1	277.0	313.0	214.1	196.0	191.1	159.0

Notes:

- Expenditures include a project with a cloud computing arrangements (Ex. D3-1-2, p. 3, footnote 1).
- Corporate Headquarters includes the cost to acquire the building and associated renovation. The acquisition cost excludes costs associated with undeveloped land.
- Clarington Corporate Campus (EB-2020-0290) is not shown as the project was cancelled for a preferable alternative and written off to Project OM&A. The cancelled project is discussed further in Ex. D3-1-1 Section 3.2.

Numbers may not add due to rounding.

Updated: 2026-03-10
 EB-2025-0297
 Exhibit D3
 Tab 1
 Schedule 1
 Table 2

Table 2
 Comparison of Capital Expenditures - Support Services (\$M) 2020-2031
 (Capital Expenditures Impacting OPG Rate Base or Asset Service Fees)

Line No.	Business Unit	2020 OEB Approved ⁵	(c)-(a) Change	2020 Actual	2021 OEB Approved ⁵	(f)-(d) Change	2021 Actual	2022 OEB Approved ⁵	(i)-(g) Change	2022 Actual	2023 OEB Approved ⁵	(l)-(j) Change	2023 Actual
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
	Capital Projects (Allocated)												
1	IT Portfolio ¹	6.2	94.8	101.0	7.4	97.2	104.6	76.6	20.3	96.9	71.0	45.4	116.4
2	Real Estate	8.0	12.0	20.0	8.0	16.3	24.3	29.5	(1.5)	27.9	4.2	33.2	37.4
3	Subtotal Capital Projects (Allocated)	14.2	106.8	121.0	15.4	113.5	128.9	106.1	18.8	124.9	75.2	78.6	153.8
4	IT Portfolio (Unallocated)	0.0	0.0	0.0	0.0	0.0	0.0	14.6	(14.6)	0.0	7.5	(7.5)	0.0
5	Subtotal Capital Projects	14.2	106.8	121.0	15.4	113.5	128.9	120.7	4.2	124.9	82.7	71.1	153.8
6	Microsoft Enterprise Agreement ²	0.0	23.1	23.1	0.0	0.0	0.0	0.0	0.0	0.0	23.0	(23.0)	0.0
7	Clarington Corporate Campus ³	0.0	0.0	0.0	0.0	0.0	0.0	93.0	(93.0)	0.0	80.0	(80.0)	0.0
8	Corporate Headquarters ⁴	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	61.4	61.4
9	Subtotal	0.0	23.1	23.1	0.0	0.0	0.0	93.0	(93.0)	0.0	103.0	(41.6)	61.4
10	Enterprise System Modernization Projects	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	Enterprise System Modernization Projects- Unallocated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	DNNP Operational Readiness Technology Projects	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	DNNP Operational Readiness Technology Projects- Unallocated Projects	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	Total (line 5 + line 9 + line 12 + line 15)	14.2	129.8	144.0	15.4	113.5	128.9	213.7	(88.8)	124.9	185.7	29.5	215.1

Line No.	Business Unit	2024 OEB Approved ⁵	(c)-(a) Change	2024 Actual	2025 OEB Approved ⁵	(f)-(d) Change	2025 Budget	2026 OEB Approved ⁵	(i)-(g) Change	2026 Budget	2022-2026 Actuals & Budget	(l)-(j) Change	2027-2031 Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
	Capital Projects (Allocated)												
17	IT Portfolio ¹	41.7	51.0	92.7	66.0	37.0	103.0	14.5	18.9	33.4	442.4	(364.4)	78.0
18	Real Estate	12.3	22.4	34.7	11.6	24.5	36.1	8.4	68.2	76.6	212.8	53.2	265.9
19	Subtotal Capital Projects (Allocated)	54.0	73.4	127.4	77.6	61.5	139.1	22.9	87.1	110.0	655.2	(311.3)	343.9
20	IT Portfolio (Unallocated)	39.5	(39.5)	0.0	17.2	(17.2)	0.0	68.7	(5.5)	63.2	63.2	291.0	354.1
21	Subtotal Capital Projects	93.5	33.9	127.4	94.8	44.3	139.1	91.6	81.6	173.2	718.4	(20.3)	698.1
22	Microsoft Enterprise Agreement ²	0.0	0.0	0.0	0.0	0.0	0.0	23.0	(23.0)	0.0	0.0	0.0	0.0
23	Clarington Corporate Campus ³	18.0	(18.0)	0.0	2.0	(2.0)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	Corporate Headquarters ⁴	0.0	44.1	44.1	0.0	85.3	85.3	0.0	0.0	0.0	190.8	(190.8)	0.0
25	Subtotal	18.0	26.1	44.1	2.0	83.3	85.3	23.0	(23.0)	0.0	190.8	(190.8)	0.0
26	Enterprise System Modernization Projects	0.0	0.0	0.0	0.0	12.2	12.2	0.0	48.1	48.1	60.3	(2.0)	58.3
27	Enterprise System Modernization Projects- Unallocated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	10.3	10.3	225.6	235.9
28	Subtotal	0.0	0.0	0.0	0.0	12.2	12.2	0.0	58.5	58.5	70.6	223.5	294.2
29	DNNP Operational Readiness Technology Projects	0.0	0.0	0.0	0.0	15.1	15.1	0.0	15.3	15.3	30.4	7.9	38.3
30	DNNP Operational Readiness Technology Projects- Unallocated Projects	0.0	0.0	0.0	0.0	10.3	10.3	0.0	30.1	30.1	40.4	2.4	42.8
31	Subtotal	0.0	0.0	0.0	0.0	25.4	25.4	0.0	45.3	45.3	70.7	10.3	81.0
32	Total (line 21 + line 25 + line 28 + line 31)	111.5	60.1	171.5	96.8	165.2	262.1	114.6	162.4	277.0	1,050.6	22.7	1,073.3

Notes:

- Expenditures include a project with a cloud computing arrangements (Ex. D3-1-2, p. 3, footnote 1).
- Variance in 2023 and 2026 due to updated accounting treatment of these costs as OM&A (Ex. D3-1-1, s. 3.1.4)
- Clarington Corporate Campus (EB-2020-0290) is not shown as the project was cancelled for a preferable alternative and written off to Project OM&A. The cancelled project is discussed further in Ex. D3-1-1 Section 3.2.
- Corporate Headquarters includes the cost to acquire the building and associated renovation. The acquisition cost excludes costs associated with undeveloped land.
- For comparison with the Corporate Headquarters project, the "OEB Approved" column includes the Clarington Corporate Campus project capital expenditures planned EB-2020-0290, including the years 2022 (\$93.0M), 2023 (\$80.0M), 2024 (\$18.0M) and 2025 (\$2.0M). A deferral account for the Clarington Corporate Campus project was established in EB-2020-0290 and associated impacts were excluded from the EB-2020-0290 final payment amounts order.