NUCLEAR BASE AND DNNP OPERATIONAL READINESS OM&A COSTS

1.0 PURPOSE

This evidence presents Base OM&A expenses for OPG's nuclear facilities and the Darlington New Nuclear Program ("DNNP") facilities, and DNNP Operational Readiness OM&A costs for the historical period, bridge year, and IR term.

2.0 OVERVIEW

OPG Nuclear Facilities Base OM&A

The OPG nuclear facilities Base OM&A expenses for 2020-2031 are provided in Ex. F2-2-1, Table 1a. This Application seeks approval of OPG Nuclear facilities Base OM&A expenses of $840.4M in 2027, $850.7M in 2028, $898.4M in 2029, $916.8M in 2030, and $1,225.4M in 2031. Compared to the 2022-2026 period, Base OM&A expenses over the IR term are approximately 30% lower.

The 2025-2031 Business Plan recognizes the changes in workforce needs as OPG shifts from an organization that was planning for a significant downsizing to one entering a period of significant investment. During the IR term, Pickering Units 5-8 will be undergoing a refurbishment with Unit 5 return to service planned for May 2031. As such, the Base OM&A expenses over the IR term leading up to, during, and beyond the four unit refurbishment outage, represent a reduction relative to the 2025 and 2026 bridge years due to the refurbishment outage after September 2026. The Base OM&A expenses remain stable for most of the IR term, with an increase in costs in 2031 mainly due to the Pickering Unit 5 return to service.

During the period from 2022-2024, the Company shifted from planning for Pickering shutdown by the end of 2025 to enabling extended operations to September 2026 and beginning to plan for refurbishing Pickering Units 5-8 thereafter. This shift required a responsive workforce plan to meet these changing business needs, while anticipating an increased risk of attrition over

the remaining life of the station. As of 2022, Nuclear Operations OM&A funded Full-Time Equivalents ("FTEs") were beginning to attrite to levels lower than those planned in EB-2020-0290, particular in the PWU-represented Term Employee[1] categories, which if left unaddressed, would have led to inadequate staffing levels to meet operational needs. With the implementation of responsive workforce strategies, by 2023, FTE levels aligned more closely to the original planned resourcing requirements identified in EB-2020-0290. By 2024, FTEs had increased to levels necessary for the extension of Pickering operations to 2026, to maintain site continuity through the planned Pickering refurbishment outage, and to meet ongoing operational and regulatory requirements. A further discussion of OPG's workforce strategies can be found at Ex. F4-3-1, Section 5.

The Nuclear Operations OM&A funded FTE levels over the 2025 and 2026 bridge years support meeting operational needs leading up to the refurbishment outage, while considering anticipated attrition over the remaining life of the station. This period is followed by a forecast reduction of 27.5% in FTEs in 2027 over 2025, as the resources are redeployed to support refurbishment and other areas of the business (Ex. F2-1-1, Table 2a). Staffing levels are then expected to remain stable through 2030 during the refurbishment outage, and then increase in 2031 due to the Pickering Unit 5 return to service. As a result of the refurbishment outage, OPG also expects a reduction to non-regular FTEs over the IR term as compared to the 2025 and 2026 bridge years.

Like other parts of the organization, OPG nuclear facilities Base OM&A expenses have experienced elevated inflationary cost increases since EB-2020-0290, including higher labour cost escalation reflecting bargaining process outcomes, including as a result of the repeal of the *Protecting a Sustainable Public Sector for Future Generations Act, 2019* ("Bill 124"), as discussed in Ex. F4-3-1, Section 6.2.

OPG's plan for both the station and support organizations demonstrates a continued focus on workforce planning and resourcing, cost controls and work reduction or elimination through

[1] Term employee is a Classification of PWU-represented employee who could be hired instead of regular staff in circumstances where employees were likely to be laid off as a result of the planned shutdown of Pickering.

streamlining workflows. OPG continues to implement various fleet-wide and site-specific initiatives for its nuclear business aimed at driving continuous improvement and achieving cost efficiencies (Ex. F2-1-1, Section 3.4).

DNNP Facilities OM&A

The DNNP facilities Base OM&A expenses for 2026-2031 are provided in Ex. F2-1-1, Table 1b. This Application seeks approval of DNNP facilities Base OM&A expenses of $4.3M in 2027, $5.0M in 2028, $5.3M in 2029, $34.4M in 2030, and $119.0M in 2031.

The requested Base OM&A funding for both Operations & Project Support organizations and the station primarily reflects the planned costs for DNNP Unit 1 beginning operations in late October 2030. These planned amounts reflect the anticipated staffing structure for the station based on a minimum complement strategy, leveraging the BWRX-300 plant design to optimize the workforce required to operate and maintain the plant. The design aspects supporting DNNP's more efficient operating and maintenance costs include: passive fail-safe systems with minimal control room and field actions required, plant design simplification through the elimination of systems and components in comparison to traditional Boiling Water Reactors, and where possible, minimizing the variability in training, procedures, and parts. The design facilitates automation of operation, testing and monitoring of plant systems and components.

The planned staffing structure also reflects that staff will be trained and qualified on a wider scope of tasks, leveraging broadened job classifications negotiated for PWU-represented roles. The streamlined operating model also reflects the greater resourcing flexibility negotiated with the union in support of maintenance outages for DNNP operations. Finally, the operating model will benefit from an integrated modern suite of technology that will efficiently address DNNP facilities' needs (Ex. D3-1-1).

The planned base OM&A expenses for the DNNP facilities also include allocations for Operations and Project Support functional groups, aligned with OPG's cost allocation methodology (Ex. F3-1-4).

Under OPG's cost allocation methodology, Operations & Project Support costs can be attributed to the DNNP facilities in three ways, as further detailed in the Elenchus Research Associates report (Ex. F3-4-1, Attachment 1):

1. Direct assignment of specific resources to the DNNP facilities;
2. Direct assignment of specific resources to the nuclear business as a whole, the costs of which are in turn allocated amongst the nuclear facilities including to the DNNP facilities using a cost driver; and
3. Allocation of costs across OPG's business, which are typically allocated to the individual OPG operating facilities, including the DNNP facilities, using an applicable cost driver.

DNNP Operational Readiness OM&A

In advance of DNNP facilities operations, resources will be leveraged to ensure readiness to safely, reliably and effectively operate these first-of-a-kind units once they are online (Section 4.0). DNNP Operational Readiness OM&A expenses over the IR term are provided in Ex. F2-1-1, Table 1b. This Application seeks OEB approval for DNNP Operational Readiness OM&A expenses of $45.9M for 2027, $46.3M for 2028, $40.0M for 2029, $40.2M for 2030, and $0.0M for 2031.

3.0 BASE OM&A BACKGROUND

Base OM&A funds the operations and maintenance of the nuclear stations, in support of:

- the safe operation of the plants;
- the ongoing production of electricity from the operating nuclear units;
- improving the reliability of the nuclear assets; and
- ensuring compliance with applicable legislation and nuclear regulatory requirements.

3.1 Base OM&A Description by Function and Resource Type

The Base OM&A costs for OPG nuclear facilities and DNNP facilities over the IR term are presented by Nuclear Station and Operations and Project Support in Ex. F2-2-1, Table 1a and 1b. The Nuclear Station and Operations and Project Support functions are described in Attachment 1 to this exhibit. Exhibit F2-2-1, Table 1a breaks out the Capacity Refurbishment Variance Account eligible nuclear facilities Base OM&A expenses, consisting of the Fuel Channel Life Extension Project, Pickering Extended Operations, and Optimization of Pickering Shutdown Enabling Costs (Ex. F2-1-1).[2]

Details of station Base OM&A costs by function and the allocation of Operations and Project Support costs between Pickering, Darlington and DNNP facilities for 2027-2031, are provided in Ex. F2-2-1, Tables 10-14. For OPG nuclear facilities, the majority of station base OM&A costs during the IR term are in the Operations and Maintenance functions, reflecting the significance of these core activities to ongoing station performance. As shown in Ex. F2-2-1, Table 1a, within Operations and Project Support, the majority of costs are Enterprise Engineering and Integrated Fleet Management, primarily for ensuring plant safety, reliability and training. In 2031, the majority of DNNP facilities station Base OM&A costs are in the Operations and Maintenance functions, reflecting the significance of these core activities to ongoing station performance, and within Operations and Project Support the majority of costs are in Enterprise Engineering and Integrated Fleet Management, primarily for ensuring plant safety, reliability and training.

In addition to the operational functions described in Attachment 1, OPG nuclear facilities Base OM&A also funds the following:

- The cost of staffing resources supporting the execution of planned outages, with the exception of Advanced Inspection and Maintenance (formerly Inspection and Reactor Innovation). The cost of Advanced Inspection and Maintenance staff involved in the execution of planned outages is charged directly to outage OM&A.

[2] See Ex. H1-1-1 for discussion of the Capacity Refurbishment Variance Account.

- All costs for forced outages, planned derates and forced derates. Forced outages can require significant effort and materials to address the cause of the outage and return a unit to operation. As forced outages are unplanned events for which no budget is provided, other base OM&A work must be deferred to accommodate them (see Ex. F2-4-1 for further details on outage costing).
- An inventory obsolescence provision to account for potential losses from inventory that may become obsolete, unsellable, or unusable in the future.

Base OM&A cost information for nuclear facilities and DNNP facilities are presented by standard OPG resource types in Ex. F2-2-1, Table 2a and 2b. OPG labour (regular and non-regular) is the most significant contributor to Base OM&A costs representing approximately 70.5% for OPG's nuclear facilities and 58.1% for DNNP facilities.

The resource types are as follows:

1. **Labour:** The salary and benefits cost of OPG full-time regular staff consisting of management, Society of United Professionals and Power Workers' Union employees. Base OM&A labour costs are derived using standard labour rates for job families within Nuclear. In addition to base salary and statutory benefits (e.g., Employment Insurance, Canada Pension Plan), these standard labour rates include a component for pension and other post-employment benefits earned by employees for current service (discussed in Ex. F4-3-2) as well as a component for current employee health, dental and other benefits provided during employment.
2. **Non-Regular Labour**: The salary and any applicable benefits cost of OPG non-regular staff consisting of Power Workers' Union Term Employee, Society of United Professionals Extended Temporary Employee, and other employees hired for a fixed period of time with a start and end date.
3. **Overtime:** The cost of incremental pay for work outside of core hours, for example during forced outages or urgent repairs.
4. **Augmented Staff:** Costs for external personnel providing specialized expertise (e.g., engineering) to supplement internal capability and/or to fill temporary vacancies.

5. **Materials:** The costs of all consumables, replacement parts, and associated transportation service costs supporting station operations (e.g., ongoing maintenance and repair work).
6. **Licence Fees:** The cost of licensing-related fees primarily paid to the Canadian Nuclear Safety Commission ("CNSC").
7. **Other Purchased Services:** The costs of specialized external services, including construction and maintenance services, laundry services, and specialized technical services (e.g., nuclear safety analysis, research and development, and specialized testing services). A discussion of the trend in Other Purchased Services over the period 2027-2031 is provided below.
8. **Other:** Costs for miscellaneous items such as variable low and intermediate level waste expenses, travel, and inventory obsolescence provision.

Leading into 2024, OPG has increasingly relied on the use of Term Employees and other non-regular labour for Base OM&A work, within collective agreement provisions, to effectively manage staffing resources required in contemplation of the then planned Pickering shutdown. In 2024, OPG made a decision to hire a number of Term Employees to regular positions within operations and maintenance in the face of increased attrition and a tightening labour market supply for these skillsets (Ex. F4-3-1, Section 5.1.1). Over the IR term, use of non-regular staff is planned to further decrease as the Company redeploys resources from the Darlington Refurbishment Program and Pickering to support its base work programs over this period. A breakout of total FTEs for OPG nuclear facilities and DNNP facilities is provided in Ex. F2-1-1, Table 2a and 2b, respectively, which separately identifies FTEs funded by OM&A, capital, refurbishment, nuclear non energy direct and provision.[3]

Incremental short-term labour resources, including overtime, non-regular labour, augmented staff and Other Purchased Services, are used as appropriate to operate the nuclear facilities safely, reliably and efficiently. Three primary factors have traditionally driven the use of incremental short-term labour resources in Nuclear: 1) to meet peak work requirements, 2) to maintain coverage for key staff positions in accordance with licensing requirements, and 3) to complete priority work impacted by short term or staff shortages due to factors such as

[3] "Provision" refers to OPG's accrued liabilities for nuclear decommissioning and waste management (Ex. C2-1-1).

temporary vacancies, permissible leaves, and vacations. The selection of incremental labour resource type to employ is an ongoing resource optimization and balancing process and depends on the specific circumstances driving the need for incremental resources. For example, OPG uses Base OM&A overtime to maintain coverage of key positions (e.g., authorized nuclear operators) and provide backup for these staff if absent, to maintain minimum staff complement on each shift.

For OPG nuclear facilities Base OM&A, the need for short term resources, including Other Purchased Services, remains stable from 2027-2030 before increasing (Ex. F2-2-1, Table 2a) with the return of Pickering Unit 5 to service in 2031. For DNNP facilities base OM&A, incremental short-term labour resources costs are immaterial over the IR term, with Unit 1 commercial in service planned in October 2030 (Ex. F2-2-1, Table 2b).

3.2 Major Objectives and Focus Areas

The 2025-2031 Business Plan identifies specific objectives, focus areas and planned costs to drive productivity and efficiency. These initiatives are expected to position Darlington's Total Generating Cost within second quartile of industry performance toward the end of the Business Plan period, while maintaining continued safe and reliable operations (Ex. F2-1-1).

In order to meet planned OM&A costs, fleet-wide initiatives have been implemented for the Nuclear business, as discussed in Ex. F2-1-1, Section 3.4.2.1. These initiatives are designed to help achieve the 2025-2031 Business Plan targets (Ex. F2-1-1, Section 3.3), and over the IR term, will be executed by Base OM&A resources (for Darlington) and both Base OM&A and Pickering Cyclical Maintenance OM&A resources (for Pickering), who will carry out ongoing inspection, maintenance and regulatory compliance activities, and ensure operational readiness for return to service at Pickering.[4]

[4] Engineering, maintenance, security, and nuclear operators.

3.3 Ongoing Station Support and Compliance Activities During Pickering Refurbishment

Separate from the workforce requirements for the Pickering Refurbishment, there is ongoing work necessary to maintain Pickering Units 5-8 and the associated infrastructure during the four unit refurbishment outage, while ensuring compliance with Licence requirements and readiness to return the unit to service. The Licence incorporates a comprehensive review of station operations and includes compliance requirements with regulatory standards, such as protecting the health and safety of the public and the environment, maintaining national security and adhering to international obligations. The Licence conditions continue to apply to Pickering throughout the entire refurbishment outage. These conditions require OPG to maintain applicable resources across a range of key support functions across the following areas: Enterprise Engineering, Integrated Fleet Management, Environment, Health & Safety, and Other Support. Base OM&A funding for such work over the IR term is inclusive of the following:

- **Enterprise Engineering**: The equipment and systems at the station, whether in active refurbishment or awaiting refurbishment, will require monitoring, oversight and troubleshooting along with ongoing execution of aging management programs. Such systems on all four units will cover areas such as nuclear and conventional safety functions, security, water supply systems, radiation protection, electrical supplies including battery banks, will remain in-service during the refurbishment outage.

  Within the Licence, there are CNSC regulations and other requirements, including the Ontario Building Code, Ontario Fire Code, *Environmental Protection Act*, American Society of Mechanical Engineers Pressure Boundary Code (“ASME”) and many standards within the Canadian Standards Association framework, that must continue to be adhered to during the refurbishment outage. For example, the ASME code requires that safety relief valves for systems and components installed to prevent over pressure events continue to be replaced and tested on a routine basis to ensure high quality protection, which requires engineering oversight.

The work required to meet regulations set out in the Licence and to support upkeep of the equipment requires both Station and Central engineering support.

For example, most digital control computer and control systems, chemistry technical support systems, periodic inspection programs, environmental qualification and pressure boundary programs will remain active when the units are de-fueled and de-watered, thereby requiring proper testing and maintenance for safety and regulatory compliance. Nuclear operational safety requirements include maintaining and developing codes and tools for Irradiated Fuel Bay stored fuel, implementing modifications and fuel management studies to support fresh core operation, and ongoing compliance activities with the CNSC. Other activities include fish diversion system maintenance and wildlife count reporting, and groundwater contamination testing.

Furthermore, OPG will also continue membership in Conexus (formerly CANDU Owners Group) with respect to Pickering. Maintaining Conexus membership throughout the refurbishment outage period benefits OPG and supports “second life” operations by maintaining OPG’s involvement in research and development areas of focus.

- **Integrated Fleet Management:** This organization carries out a number of central functions including security, fleet maintenance, fleet operations including human performance and stakeholder relations. These functions are integral to meeting ongoing site requirements during the refurbishment outage.

Site security programs must continue, including the emergency preparedness program, patrols of the protected area, performance monitoring, reporting requirements to the CNSC, fire protection, and administration of material safety and other permits.

Fleet maintenance is required to support systems such as service water, instrument and service air and heating, ventilation and air conditioning, which must be performed in accordance with OPG maintenance program governance and federal and provincial

requirements. Fleet maintenance also supports on going programs such as hoisting and rigging, foreign material exclusion, equipment calibration and control.

Fleet operations provides program governance and oversight for the maintenance program and is the primary interface to external agencies including the World Association of Nuclear Operators ("WANO") and the CNSC. This also includes ownership, oversight and support of the corporate work protection program which is required to ensure compliance with OHSA and other corporate requirements.

Furthermore, OPG will also continue membership in WANO with respect to Pickering. Maintaining WANO membership is fundamental to OPG's role as a nuclear fleet operator focused on ensuring excellence in operational nuclear safety.

- **Other Support:** The Licence and CSA Standard N286-12 require independent assessments of all 46 programs applicable to OPG Nuclear Management System. The nuclear oversight function will continue to complete audits and assessments on these programs to assess all activities affecting Pickering. These audits and assessments will continue to identify opportunities for improvement supporting safe, reliable maintenance of the facility. The nuclear regulatory affairs function will continue to interface with the CNSC in relation to the ongoing Licence requirements independent of the PRP.

3.4 OPG Nuclear Facilities Base OM&A Trends

The decrease in IR term Base OM&A expenses compared to the previous five-year period reflects the transition of Pickering Units 5-8 to refurbishment, with all four units planned to come offline in September 2026. It also reflects the permanent shutdown of Pickering Units 1 and 4 in the fourth quarter of 2024. The planned return to service of Unit 5 in May 2031 results in a restoration of substantial Base OM&A funding for part of that year. This funding reflects the substantial fixed costs involved in operating any one unit at the station. In line with these factors, Pickering's Base OM&A expenses decrease from an average of approximately $420M over the 2022-2026 period to an average of under $20M over the 2027-2030 period before

partially restoring to over $250M in 2031. These figures are inclusive of labour and other cost escalation impacts over time.

Darlington's Base OM&A expenses are forecasted to have a generally stable trend, reflecting ongoing station operations with the last unit, Unit 4, expect to return from refurbishment by April 2026. Excluding the impact of higher materials requirements beginning in 2027, associated with the return to four-unit operations, Darlington's Base OM&A expenses are forecast to increase by approximately 2.75% per year over the 2024-2031 period reflecting labour and other cost escalation. Planned Darlington Base OM&A expenses average just over $425M over the IR term.

Planned Base OM&A expenses for Operations & Project Support groups average approximately $440M per year over the 2027-2030 period, compared to $550M during the 2022-2026 period. This approximately 20% decrease reflects the transition of Pickering Units 5-8 to refurbishment. Similar to the Pickering station Base OM&A expenses, the costs are forecast to restore to approximately $520M in 2031. The figures above are inclusive of labour and other cost escalation impacts.

An explanation of period-over-period variances in base OM&A is provided in Ex. F2-2-2.

3.5 DNNP Facilities Base OM&A Trends

DNNP facilities Base OM&A costs are forecasted to be generally stable leading up to the commercial in-service date of October 2030, with modest amounts of costs attributed from Operations and Project Support Functional groups under OPG's cost allocation methodology during this period. Costs then increase as the first unit that goes into service in October 2030 and then has its first full year of operation in 2031.

An explanation of period-over-period variances in Base OM&A is provided in Ex. F2-2-2.

4.0 DNNP OPERATIONAL READINESS BACKGROUND

DNNP Operational Readiness includes activities required for ensuring readiness to safely, reliably and effectively operate Unit 1 once commercially in-service. These activities will cover comprehensive planning efforts such as developing operational processes and procedures, establishing work management functions for scheduling routine and outage maintenance, planning for emergency management and fire protection, implementing plant maintenance protocols, implementing comprehensive employee training programs tailored to the operation and maintenance requirements of the units, creating a specialized workforce with technology-specific expertise, defining oversight systems and establishing operational targets.

DNNP Operational Readiness also includes the training of the staff who will operate Unit 1 once it is commercially in-service, with the initial hiring cohort planned to occur in late 2026. Once staff completes training, they will support Operational Readiness activities and/or transition to commissioning as required by the DNNP project schedule. Commissioning is a DNNP capital funded workstream. Additional cohorts will be hired closer to Unit 1 commercial in-service to ensure that the planning and commissioning needs of the unit are met.

4.1 Operational Readiness OM&A Trends

DNNP Operational Readiness OM&A is forecasted to increase year-over-year by 59.5% in 2027, 0.9% in 2028, decrease by 13.7% in 2029, increase by 0.7% in 2030, and decrease 100.0% in 2031. Costs over the IR term vary as OPG prepares operational readiness for Unit 1 of the DNNP. The increase in 2027 compared to 2025-2026 is driven by the hiring and training of future operational staff and support required to plan the operations and management of the first unit. The decrease in 2029 is driven by staff transitioning from supporting operational readiness to commissioning. The decrease in 2031 is driven by Unit 1 becoming operational in October 2030.

LIST OF ATTACHMENTS

Attachment 1: Nuclear Operations Function Descriptions

ATTACHMENT 1 - NUCLEAR OPERATIONS FUNCTION DESCRIPTIONS

Since the OEB's Decision and Order in EB-2020-0290, there have been several changes to the structure of Nuclear operations.[1] For purpose of presentation of Base OM&A costs in Ex. F2-1-1, Table 1a and 1b and Ex. F2-2-1, Tables 3 to 14, Nuclear Operations functions has been segmented into Nuclear Stations, and Operations and Project Support, with the above changes applied to actuals and restated OEB-approved as if effective in 2020, unless otherwise noted below.

The following provides details on the operational functions within Nuclear Stations and Operations and Project Support.

1.0 OPERATIONAL FUNCTIONS WITHIN THE GENERATING STATIONS

At each of the generating stations (Darlington, Pickering and, as applicable in the future, DNNP facilities), operational functions are broken down into three main components: Operations and Maintenance, Work Management, and Site and Support Services, as described below. Darlington also operates the Tritium Removal Facility ("TRF")**.**

- Operations and Maintenance is comprised of:
  - Operations, which operates the plant on a 24-hour basis. The CNSC approves the operations organizational structure, including mandating a minimum shift complement to address foreseeable emergency response requirements.
  - Maintenance, which performs:
    - Maintenance activities, which includes all activities directly related to the preventive, elective, and corrective maintenance of structures, systems, or components to address material condition issues, maintain equipment reliability, and optimize equipment life, and,

[1] These changes are summarized in Ex. A1-3-1, Attachment 1, along with the normalization of historic Nuclear OM&A categories.

- Fuel Handling, which includes all activities in support of refuelling the reactor during unit operation; maintenance of the fuelling machines and related systems; support of outage activities requiring the fuelling machine or related systems; and management of new fuel storage.

- Work Management includes:
  - Work Control, which ensures that corrective, elective, and preventive maintenance is planned effectively and efficiently.
  - Outage Planning, which develops specific milestones for scope definition, long lead materials, schedule development, and pre-requisite work.

- Site and Support Services includes:
  - Chemistry, which includes the operation of the chemistry lab and assistance in managing plant chemistry.
  - Common Services (Pickering), which operates and maintains station and site support systems for the Pickering station, specifically management of heavy water and operation of facilities such as heavy water upgraders, station containment systems and radioactive waste management.
  - Site Vice President's office.
  - Interface with World Association of Nuclear Operators ("WANO") and other external parties.
  - Radiation Safety, which is accountable for radiation protection programming and services including assistance with radiation protection during plant operation and maintenance activities, and administration of the program for keeping radiation As Low As Reasonably Achievable ("ALARA").
  - Performance Improvement, which has oversight of Nuclear's corrective action program, nuclear safety culture, and a self-assessment program that conducts research and collects information to resolve a performance gap or to identify opportunities to achieved industry excellence in specific program areas.

- Tritium Removal Facility
  - Located at Darlington, the TRF provides tritium removal services to all OPG nuclear stations and third party customers (see Ex. G2-1-1).

2.0 OPERATIONAL FUNCTIONS WITHIN OPERATIONS AND PROJECT SUPPORT

Operations and Project Support is accountable for providing specialized services to the stations, as well as establishing the common procedural framework within which the stations operate.

For the purpose of presentation of Base OM&A in Ex. F2-2-1, Tables 1a and 1b and Ex. F2-2-1, Tables 3 to 14, Operations and Project Support has been segmented into the functional groups shown below. The following are the key functions within each group:

Enterprise Engineering is accountable for the following:

- Components Engineering provides specialized technical support for nuclear station components and equipment, major nuclear plant equipment (including life cycle plans for steam generators and fuel channels), engineering programs, selected systems (such as real-time process computers and security), chemistry, human factors engineering, plant information systems, and administration of the nuclear research and development program. This is a central function.
- Design Engineering provides design services such as, preparation of modifications; parts procurement support; and expert-level support on nuclear industry codes and standards for the nuclear stations and Nuclear Sustainability Services. This is a design function.
- Engineering Strategy provides strategic support to Enterprise Engineering long range planning, develops international relationships and provides strategic advice on matters relating to reactor technology, represents OPG Nuclear with international nuclear industry bodies and oversees Nuclear Projects executed by Enterprise Engineering. Engineering Strategy also oversees the strategy for data-driven decision making in all areas of Enterprise Operations, through a dedicated Data Analytics team (formerly part

of the Generation Strategy & Innovation group) provides insights into operations areas through the application of analytics on a broad range of available data, manage data governance, collaborate on architecture development, and will include the operation of the Monitoring & Diagnostics Centre. This is a central function.

- Nuclear Safety provides oversight of technical support provided to the stations by the Reactor Safety Engineering Departments, and specialized services in the areas of Fuel, Nuclear Safety Analysis and Probabilistic Risk Assessment. This is a central function.
- Station Engineering is responsible for specifying engineering requirements, concurrence to schedule and acceptance of engineering products and services provided to support safe operation of the plant. It also ensures the Safety Operating Envelope and the Design and Licensing Basis for the plant are maintained by exercising prescriptive authority for the definition of operating and outage scope of work associated with these basis documents. This is a station function.
- Advanced Inspection and Maintenance (formerly Inspection and Reactor Innovation) ("AIM") is accountable for providing inspection and maintenance services to supplement those carried out by station staff, where the nature of the skills or equipment required makes the work more effectively managed as a centralized function. The direct costs associated with the provision of inspection and maintenance services during outages are included in outage OM&A costs (Ex. F2-4-1). AIM indirect costs such as administration are included in base OM&A as are the provision of inspection and maintenance services during normal (i.e. non-outage) operation. Machine dynamics and performance testing services. This is a central function.

<u>Integrated Fleet Management</u> has three main functions:

- Generation Strategy & Innovation, which drives improvement across the Nuclear fleet by developing, implementing and monitoring nuclear-wide programs and procedures for the nuclear stations in the areas of Operations, Maintenance, Performance Improvement Support and Human Performance. It is also responsible for nuclear fleet-wide asset management and generation planning, to ensure a strategic and

streamlined approach to determining future investments considering cost, risk and performance. Enterprise Innovation is also part of this organization, developing and implementing value-based fleet initiatives and improvements.

- Security services for nuclear sites and facilities (and across OPG) and ensures compliance with all CNSC security requirements. Emergency Preparedness and Fire Protection services are also included within this division.
- Nuclear Training has the role of training personnel to safely operate, maintain and improve performance of the Pickering and Darlington nuclear stations. The most effective way to ensure public safety and a reliable source of electricity to the grid for public safety and national security, is to ensure that the personnel that operate, maintain and engineer these commercial nuclear power plants have been trained, evaluated and qualified to consistently high standards. The group is responsible for all Training Analysis, Design, Development, Implementation and Evaluation activities associated with Nuclear Training that leads to working rights (qualifications). It is also responsible for all Nuclear Plant Access Training (regular and contractor staff) and the Training Information Management System for all of the OPG Nuclear Fleet.

<u>Environment and Health & Safety (formerly in Support Services) ("EHS") is accountable for the following;</u>

- The Environment, Health & Safety ("EHS") organization develops and maintains EHS managed systems, programs and initiatives that support all employees in the company. The group provides expertise and operational support to OPG operations, facilities, projects and functions to meet EHS compliance obligations. It acts to minimize EHS risks and impacts, and advises on management of environmental issues, health and safety hazards, and prevention of workplace injuries in support of a strong safety culture. The group reports on OPG's environmental and health & safety performance, and performance and seeks opportunities for EHS to promote leadership and innovation. Finally, it provides assessment and specialist support in the areas of aquatic and terrestrial biology, contaminated land and groundwater, radiological management, air and water emissions, waste and spills management, safe work

planning, permits and approvals, impact assessments, regulations, licenses, orders to comply, climate change related impacts and legislative monitoring.

Enterprise Projects includes Nuclear Projects as well as the Enterprise Project Management Office and Commercial Management & Project Assurance.

- Nuclear Projects, which is responsible for the planning, developing and execution of all nuclear projects (other than the Darlington Refurbishment Program).
- Enterprise Project Management Office, which is responsible for oversight of the processes, tools and project expertise necessary to deliver successful projects; serves as a source for best practices, training programs and an organizational focus for improving project performance across all portfolios.
- Commercial Management & Project Assurance, which is responsible for commercial relationships to support effective management of contracts during the post award, execution and close out phases, including Nuclear Extended Services Master Services Agreements and Engineering contracts.

Project work (in contrast to base OM&A work) is discussed in Ex. D2-1-1. While the Projects function is primarily funded by project OM&A and capital (Ex. F2-3-1 and Ex. D2-1-1, respectively), a limited amount of operational support to the stations is funded by base OM&A.

Other Support is an aggregate of a number of smaller functions including centralized or fleet-wide costs for services required to manage the Nuclear business that are not directly attributable to any one plant or support organization.

- Nuclear Oversight accountable for independent internal audits to evaluate compliance with regulatory, provincial and federal requirements and performance to industry standards of excellence and examinations of plant functional areas or various plant activities to evaluate the effectiveness of work practices and/or management controls.
- Nuclear Regulatory Affairs and Stakeholder Relations accountable for obtaining required CNSC approvals in a timely manner, ensuring that OPG complies with its

licenses, regulatory requirements and commitments, and managing regulatory issues while maintaining good working relations with the CNSC.

- Renewable Generation Operations functions providing support for the Nuclear fleet, such as Energy Markets, with costs shown in Nuclear base OM&A actuals and plan.
- Costs include executive officers, inventory adjustments and, as applicable, Hydro One share awards expenses. Costs also include the limited amount of base OM&A in Nuclear Sustainability Services.

Low and Intermediate Level Waste includes low and intermediate level waste storage and disposal variable expenses for the Nuclear stations (Ex. C2-1-1).

Numbers may not add due to rounding.

Table 1a
Base OM&A - OPG Nuclear Facilities ($M)

Line No.	Function	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)
	OPG Nuclear Facilities[1]												
1	Darlington NGS	324.5	334.9	337.6	340.3	361.4	371.9	373.3	409.0	405.9	432.3	437.4	447.6
2	Pickering NGS	459.4	460.3	450.0	521.3	468.8	370.8	305.7	8.1	15.5	22.3	24.6	255.6
3	**Total OPG Nuclear Facilities**	783.9	795.2	787.7	861.6	830.2	742.7	679.0	417.1	421.4	454.5	462.1	703.3
	Operations and Project Support[1,2]												
4	Enterprise Engineering	217.2	209.3	215.7	242.5	253.0	239.4	217.8	164.0	164.8	173.9	177.0	217.6
5	Integrated Fleet Management	188.2	178.9	173.6	188.5	221.9	203.3	200.3	165.8	169.5	176.1	183.1	205.2
6	Environment, Health & Safety	18.0	21.9	16.0	13.9	13.5	11.8	14.3	14.0	14.3	13.7	14.6	15.6
7	Enterprise Projects	15.5	16.9	17.7	16.1	16.4	13.2	9.5	6.4	6.9	6.5	6.4	7.0
8	Other Support	68.7	72.1	67.4	81.5	84.1	82.9	79.6	69.5	70.3	71.2	70.9	72.7
9	Low and Intermediate Level Waste	6.9	6.7	16.3	12.3	11.5	9.2	9.7	3.6	3.4	2.6	2.7	4.1
10	**Total Operations and Project Support**	514.4	505.8	506.6	554.8	600.4	559.8	531.2	423.3	429.2	443.9	454.7	522.2
	CRVA Eligible Costs												
11	Fuel Channel Life Extension Project	7.8	8.7	9.7	1.1	(0.1)	0.4	0.0	0.0	0.0	0.0	0.0	0.0
12	Pickering Extended Operations	7.2	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	Optimization of Pickering Shutdown	0.5	0.9	1.7	1.4	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	**Total CRVA Eligible Costs**	15.6	15.0	11.4	2.5	2.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0
15	**Total Base OM&A**	1,313.9	1,316.0	1,305.7	1,418.9	1,433.5	1,303.0	1,210.2	840.4	850.7	898.4	916.8	1,225.4

Notes:

1 The figures presented here for 2020 Actuals have been restated for Nuclear organizational changes and transfers from Corporate Support ((See Ex. A1-4-1 Attachment 2 and Ex. F2-2-1, Attachment 1).

2 Operations and Project Support has been allocated between Darlington NGS and Pickering NGS:

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Darlington NGS	235.4	241.7	229.9	241.2	278.9	287.3	282.6	299.2	303.9	312.8	313.4	318.1
Pickering NGS	279.0	264.0	276.7	313.6	321.5	272.6	248.6	124.1	125.3	131.1	141.3	204.0

Numbers may not add due to rounding.

Table 1b
Base OM&A - DNNP Facilities ($M)

Line No.	Function	2026 Budget	2027 Plan	2028 Plan	2029 Plan	2030 Plan	2031 Plan
		(a)	(b)	(c)	(d)	(e)	(f)
	DNNP Facilities						
1	DNNP Facilities	0.0	0.0	0.0	0.0	18.2	66.1
2	**Total DNNP Facilities**	0.0	0.0	0.0	0.0	18.2	66.1
	Operations and Project Support						
3	Enterprise Engineering	0.4	0.5	0.5	0.6	5.0	16.6
4	Integrated Fleet Management	0.1	0.1	0.1	0.2	4.7	25.2
5	Environment, Health & Safety	0.5	0.7	0.8	0.9	1.0	0.9
6	Enterprise Projects	1.3	1.1	1.3	1.5	1.6	1.4
7	Other Support	1.6	2.0	2.2	2.3	3.8	8.8
8	Low and Intermediate Level Waste	0.0	0.0	0.0	0.0	0.0	0.0
9	**Total Operations and Project Support**	3.9	4.3	5.0	5.3	16.1	52.9
10	**Total Base OM&A**	3.9	4.3	5.0	5.3	34.4	119.0

Numbers may not add due to rounding.

Table 2a

Base OM&A - OPG Nuclear Facilities ($M)[1]

Line No.	Resource Type	2020 Actual	2021 Actual	2022 Actual	2023 Actual	2024 Actual	2025 Budget	2026 Budget	2027 Plan	2028 Plan	2029 Plan	2030 Plan	2031 Plan	IR Term Percentage[2]
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
1	**Labour**	791.1	756.9	708.8	785.3	834.6	847.6	805.3	570.0	587.9	628.9	638.9	860.1	69.4%
2	**Non-Regular Labour[3]**	126.1	140.5	153.0	175.9	135.9	48.4	44.5	10.1	9.3	9.8	9.9	10.4	1.0%
3	**Overtime**	70.4	70.4	79.1	84.3	89.6	72.8	54.5	36.4	37.9	39.0	40.5	61.6	4.6%
4	**Augmented Staff**	13.5	13.2	9.8	9.2	8.2	2.6	0.6	1.5	1.3	1.3	1.3	1.3	0.1%
5	**Materials**	105.6	101.5	106.4	110.2	114.5	90.9	82.7	53.9	52.4	55.0	56.6	85.9	6.4%
6	**License Fees**	31.6	34.4	33.4	37.1	40.7	38.0	35.7	23.7	24.1	24.6	25.1	30.9	2.7%
7	**Other Purchased Services**	130.2	151.1	159.6	143.4	164.9	166.6	154.9	117.7	110.6	111.5	115.1	146.3	12.7%
8	**Other[4]**	45.3	47.9	55.7	73.4	45.0	36.1	31.9	27.1	27.1	28.4	29.4	28.8	3.0%
9	**Total Base OM&A**	1,313.9	1,316.0	1,305.7	1,418.9	1,433.5	1,303.0	1,210.2	840.4	850.7	898.4	916.8	1,225.4	100.0%

Notes:

1 The figures presented here for 2020 Actuals have been restated for Nuclear organizational changes and transfers from Corporate Support ((See Ex. A1-4-1 Attachment 2 and Ex. F2-2-1, Attachment 1).

2 IR Term Percentage = Sum of IR Term Resource Costs divided by Sum of IR Term Base OM&A.

3 Non-Regular labour includes costs for term and temporary staff.

4 Other costs include Low & Intermediate Level Waste expenses as per Ex. F2-2-1, Table 1a, line 9.

Numbers may not add due to rounding.

Table 2b
Base OM&A - DNNP Facilities ($M)

Line No.	Resource Type	2026 Budget	2027 Plan	2028 Plan	2029 Plan	2030 Plan	2031 Plan	IR Term Percentage[1]
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	**Labour**	3.2	3.8	4.3	4.6	17.0	67.6	57.9%
2	**Non-Regular Labour[2]**	0.0	0.0	0.0	0.0	0.1	0.2	0.2%
3	**Overtime**	0.0	0.0	0.0	0.0	0.3	1.3	1.0%
4	**Augmented Staff**	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
5	**Materials**	0.1	0.0	0.1	0.1	2.7	9.4	7.3%
6	**License Fees**	0.0	0.0	0.0	0.0	0.6	4.0	2.7%
7	**Other Purchased Services**	0.5	0.3	0.4	0.5	11.8	30.1	25.7%
8	**Other**	0.1	0.1	0.1	0.2	1.8	6.4	5.2%
9	**Total Base OM&A**	3.9	4.3	5.0	5.3	34.4	119.0	100.0%

Notes:
1 IR Term Percentage = Sum of IR Term
2 Non-Regular labour includes costs for term and temporary staff.

Table 3
Combined Nuclear Base OM&A by Function ($M)
Actual - Calendar Year Ending December 31, 2020

Line No.	Function	Darlington NGS	Pickering NGS	Total OPG Nuclear Facilities	DNNP Facilities
		(a)	(b)	(c)	(d)
	Nuclear Stations[1]				
1	Operations & Maintenance	268.1	377.4	645.5	0.0
2	- Operations	90.6	124.2	214.8	
3	- Maintenance	177.5	253.2	430.7	
4	Work Management	15.4	18.6	34.1	
5	Site and Support Services	29.6	63.3	93.0	
6	Tritium Removal Facility	11.4		11.4	
7	**Total Nuclear Stations**	324.5	459.4	783.9	0.0
8	**Operations and Project Support**[1]	235.4	279.0	514.4	0.0
	CRVA Eligible Costs				
9	Fuel Channel Life Extension Project	4.3	3.5	7.8	
10	Pickering Extended Operations		7.2	7.2	
11	Optimization of Pickering Shutdown		0.5	0.5	
12	**Total CRVA Eligible Costs**	4.3	11.3	15.6	0.0
13	**Total Base OM&A**	564.2	749.7	1,313.9	0.0

Notes:

1 The figures presented here are 2020 Actuals that have been restated for Nuclear organizational changes and transfers from Corporate Support (See Ex. A1-4-1 Att. 2 and Ex. F2-2-1, Att. 1).

Table 3a
Combined Nuclear Base OM&A by Function ($M)
OEB Approved[1] - Calendar Year Ending December 31, 2020

Line No.	Function	Darlington NGS	Pickering NGS	Total OPG Nuclear Facilities	DNNP Facilities
		(a)	(b)	(c)	(d)
	Nuclear Stations[1]				
1	Operations & Maintenance	269.9	397.9	667.8	0.0
2	- Operations	95.9	130.8	226.8	
3	- Maintenance	174.0	267.1	441.0	
4	Work Management	18.8	21.2	40.0	
5	Site and Support Services	33.5	71.0	104.5	
6	Tritium Removal Facility	12.2		12.2	
7	**Total Nuclear Stations**	334.4	490.1	824.5	0.0
8	**Operations and Project Support** [1]	218.4	307.9	526.3	0.0
	CRVA Eligible Costs				
9	Fuel Channel Life Extension Project	2.4	3.6	6.0	
10	Pickering Extended Operations		0.0		
11	Optimization of Pickering Shutdown		0.0		
12	**Total CRVA Eligible Costs**	2.4	3.6	6.0	0.0
13	**Total Base OM&A**	555.2	801.6	1,356.8	0.0

Notes:
1 The figures presented here are 2020 Plan (from EB-2016-0152, Ex. F2-2-1, Table 7) that have been restated for Nuclear organizational changes and transfers from Corporate Support (See Ex. A1-4-1 Att.2 and Ex. F2-2-1, Att.1).

Table 4
Combined Nuclear Base OM&A by Function ($M)
Actual - Calendar Year Ending December 31, 2021

Line No.	Function	Darlington NGS	Pickering NGS	Total OPG Nuclear Facilities	DNNP Facilities
		(a)	(b)	(c)	(d)
	Nuclear Stations[1]				
1	Operations & Maintenance	270.1	370.1	640.2	0.0
2	- Operations	90.3	118.6	208.9	
3	- Maintenance	179.8	251.5	431.3	
4	Work Management	17.8	17.2	35.0	
5	Site and Support Services	32.6	73.0	105.6	
6	Tritium Removal Facility	14.4		14.4	
7	**Total Nuclear Stations**	334.9	460.3	795.2	0.0
8	**Operations and Project Support**[1]	241.7	264.0	505.8	0.0
	CRVA Eligible Costs				
9	Fuel Channel Life Extension Project	3.5	5.2	8.7	
10	Pickering Extended Operations		5.4	5.4	
11	Optimization of Pickering Shutdown		0.9	0.9	
12	**Total CRVA Eligible Costs**	3.5	11.5	15.0	0.0
13	**Total Base OM&A**	580.1	735.9	1,316.0	0.0

Notes:
1 The figures presented here are 2021 Actuals that have been restated for Nuclear organizational changes and transfers from Corporate Support (See Ex. A1-4-1 Att.2 and Ex. F2-2-1, Att.1).

Table 4a
Combined Nuclear Base OM&A by Function ($M)
OEB Approved[1] - Calendar Year Ending December 31, 2021

Line No.	Function	Darlington NGS	Pickering NGS	Total OPG Nuclear Facilities	DNNP Facilities
		(a)	(b)	(c)	(d)
	Nuclear Stations[1]				
1	Operations & Maintenance	269.7	400.4	670.1	0.0
2	- Operations	95.1	127.3	222.5	
3	- Maintenance	174.6	273.0	447.6	
4	Work Management	14.6	23.2	37.8	
5	Site and Support Services	35.5	72.2	107.6	
6	Tritium Removal Facility	12.5		12.5	
7	**Total Nuclear Stations**	332.3	495.8	828.0	0.0
8	**Operations and Project Support**[1]	220.7	314.8	535.4	0.0
	CRVA Eligible Costs				
9	Fuel Channel Life Extension Project	2.4	3.6	6.0	
10	Pickering Extended Operations		0.0		
11	Optimization of Pickering Shutdown		0.0		
12	**Total CRVA Eligible Costs**	2.4	3.6	6.0	0.0
13	**Total Base OM&A**	555.3	814.1	1,369.5	0.0

Notes:
1 The figures presented here are 2021 Plan (from EB-2016-0152, Ex. F2-2-1, Table 8) that have been restated for Nuclear organizational changes and transfers from Corporate Support (See Ex. A1-4-1, Att.2 and Ex. F2-2-1, Att. 1).

Table 5
Combined Nuclear Base OM&A by Function ($M)
Actual - Calendar Year Ending December 31, 2022

Line No.	Function	Darlington NGS	Pickering NGS	Total OPG Nuclear Facilities	DNNP Facilities
		(a)	(b)	(c)	(d)
	Nuclear Stations[1]				
1	Operations & Maintenance	267.1	365.0	632.1	0.0
2	- Operations	87.5	114.6	202.1	
3	- Maintenance	179.6	250.4	430.0	
4	Work Management	24.4	16.4	40.8	
5	Site and Support Services	34.8	68.6	103.4	
6	Tritium Removal Facility	11.4		11.4	
7	**Total Nuclear Stations**	337.6	450.0	787.7	0.0
8	**Operations and Project Support**[1]	229.9	276.7	506.6	0.0
	CRVA Eligible Costs				
9	Fuel Channel Life Extension Project	3.9	5.8	9.7	
10	Pickering Extended Operations		0.0	0.0	
11	Optimization of Pickering Shutdown		1.7	1.7	
12	**Total CRVA Eligible Costs**	3.9	7.5	11.4	0.0
13	**Total Base OM&A**	571.4	734.3	1,305.7	0.0

Notes:

1 The figures presented here are 2022 Actuals that have been restated for Nuclear organizational changes and transfers from Corporate Support (See Ex. A1-4-1, Att. 2 and Ex. F2-2-1, Att. 1).

Numbers may not add due to rounding.

Table 5a
Combined Nuclear Base OM&A by Function ($M)
OEB Approved[1] - Calendar Year Ending December 31, 2022

Line No.	Function	Darlington NGS	Pickering NGS	Total OPG Nuclear Facilities	DNNP Facilities
		(a)	(b)	(c)	(d)
	Nuclear Stations[1]				
1	Operations & Maintenance	271.7	374.1	645.8	0.0
2	- Operations	94.7	111.8	206.5	
3	- Maintenance	177.0	262.3	439.3	
4	Work Management	15.9	17.9	33.7	
5	Site and Support Services	33.3	66.9	100.2	
6	Tritium Removal Facility	14.5		14.5	
7	**Total Nuclear Stations**	335.4	458.8	794.2	0.0
8	**Operations and Project Support**[1]	244.3	283.7	528.0	0.0
	CRVA Eligible Costs				
9	Fuel Channel Life Extension Project	2.4	3.5	5.9	
10	Pickering Extended Operations		0.0	0.0	
11	Optimization of Pickering Shutdown		5.8	5.8	
12	**Total CRVA Eligible Costs**	2.4	9.4	11.7	0.0
13	**Total Base OM&A**	582.1	751.9	1,334.0	0.0

Notes:

1 The figures presented here are 2022 Plan (from EB-2020-0290, Ex. F2-2-1, Table 9) that have been restated for Nuclear organizational changes and transfers from Corporate Support (See Ex. A1-4-1, Att.2 and Ex. F2-2-1, Att. 1).

Table 6
Combined Nuclear Base OM&A by Function ($M)
Actual - Calendar Year Ending December 31, 2023

Line No.	Function	Darlington NGS	Pickering NGS	Total OPG Nuclear Facilities	DNNP Facilities
		(a)	(b)	(c)	(d)
	Nuclear Stations[1]				
1	Operations & Maintenance	282.2	410.3	692.5	0.0
2	- Operations	90.2	123.5	213.8	
3	- Maintenance	192.0	286.8	478.8	
4	Work Management	15.6	15.6	31.2	
5	Site and Support Services	30.6	95.4	126.0	
6	Tritium Removal Facility	11.9		11.9	
7	**Total Nuclear Stations**	340.3	521.3	861.6	0.0
8	**Operations and Project Support**[1]	241.2	313.6	554.8	0.0
	CRVA Eligible Costs				
9	Fuel Channel Life Extension Project	0.5	0.7	1.1	
10	Pickering Extended Operations		0.0	0.0	
11	Optimization of Pickering Shutdown		1.4	1.4	
12	**Total CRVA Eligible Costs**	0.5	2.0	2.5	0.0
13	**Total Base OM&A**	581.9	837.0	1,418.9	0.0

Notes:
1 The figures presented here are 2023 Actuals that have been restated for Nuclear organizational changes and transfers from Corporate Support (See Ex. A1-4-1, Att.2 and Ex. F2-2-1, Att. 1).

Numbers may not add due to rounding.

Table 6a
Combined Nuclear Base OM&A by Function ($M)
OEB Approved[1] - Calendar Year Ending December 31, 2023

Line No.	Function	Darlington NGS	Pickering NGS	Total OPG Nuclear Facilities	DNNP Facilities
		(a)	(b)	(c)	(d)
	Nuclear Stations[1]				
1	Operations & Maintenance	268.6	370.3	638.9	0.0
2	- Operations	86.9	108.1	195.0	
3	- Maintenance	181.7	262.2	443.8	
4	Work Management	18.0	16.0	34.0	
5	Site and Support Services	32.5	68.2	100.7	
6	Tritium Removal Facility	14.7		14.7	
7	**Total Nuclear Stations**	333.8	454.5	788.2	0.0
8	**Operations and Project Support**[1]	249.9	279.5	529.4	0.0
	CRVA Eligible Costs				
9	Fuel Channel Life Extension Project	1.7	2.6	4.3	
10	Pickering Extended Operations		0.0		
11	Optimization of Pickering Shutdown		2.7	2.7	
12	**Total CRVA Eligible Costs**	1.7	5.2	7.0	0.0
13	**Total Base OM&A**	585.4	739.2	1,324.6	0.0

Notes:

1 The figures presented here are 2023 Plan (from EB-2020-0290, Ex. F2-2-1, Table 10) that have been restated for Nuclear organizational changes and transfers from Corporate Support (See Ex. A1-4-1, Att. 2 and Ex. F2-2-1, Att.1).

Table 7
Combined Nuclear Base OM&A by Function ($M)
Actual - Calendar Year Ending December 31, 2024

Line No.	Function	Darlington NGS	Pickering NGS	Total OPG Nuclear Facilities	DNNP Facilities
		(a)	(b)	(c)	(d)
	Nuclear Stations[1]				
1	Operations & Maintenance	293.9	393.3	687.2	0.0
2	- Operations	104.4	120.4	224.8	
3	- Maintenance	189.5	272.9	462.4	
4	Work Management	22.6	13.7	36.4	
5	Site and Support Services	33.2	61.8	94.9	
6	Tritium Removal Facility	11.7		11.7	
7	**Total Nuclear Stations**	361.4	468.8	830.2	0.0
8	**Operations and Project Support**[1]	278.9	321.5	600.4	0.0
	CRVA Eligible Costs				
9	Fuel Channel Life Extension Project	(0.1)	0.0	(0.1)	
10	Pickering Extended Operations		0.0	0.0	
11	Optimization of Pickering Shutdown		3.0	3.0	
12	**Total CRVA Eligible Costs**	(0.1)	3.0	2.8	0.0
13	**Total Base OM&A**	640.1	793.3	1,433.5	0.0

Notes:
1 The figures presented here are 2024 Actuals that have been restated for Nuclear organizational changes and transfers from Corporate Support (See Ex. A1-4-1, Att. 2 and Ex. F2-2-1, Att. 1).

Table 7a
Combined Nuclear Base OM&A by Function ($M)
OEB Approved[1] - Calendar Year Ending December 31, 2024

Line No.	Function	Darlington NGS	Pickering NGS	Total OPG Nuclear Facilities	DNNP Facilities
		(a)	(b)	(c)	(d)
	Nuclear Stations[1]				
1	Operations & Maintenance	277.2	352.7	630.0	0.0
2	- Operations	90.5	103.8	194.3	
3	- Maintenance	186.7	248.9	435.7	
4	Work Management	16.6	13.3	29.9	
5	Site and Support Services	31.0	65.3	96.3	
6	Tritium Removal Facility	15.1		15.1	
7	**Total Nuclear Stations**	340.0	431.3	771.3	0.0
8	**Operations and Project Support**[1]	251.0	283.2	534.2	0.0
	CRVA Eligible Costs				
9	Fuel Channel Life Extension Project	0.3	0.5	0.8	
10	Pickering Extended Operations		0.0		
11	Optimization of Pickering Shutdown		4.8	4.8	
12	**Total CRVA Eligible Costs**	0.3	5.3	5.6	0.0
13	**Total Base OM&A**	591.3	719.9	1,311.2	0.0

Notes:
1 The figures presented here are 2024 Plan (from EB-2020-0290, Ex. F2-2-1, Table 11) that have been restated for Nuclear organizational changes and transfers from Corporate Support (See Ex. A1-4-1 Att. 2 and Ex. F2-2-1, Att.1).

Numbers may not add due to rounding.

Table 8
Combined Nuclear Base OM&A by Function ($M)
Budget - Calendar Year Ending December 31, 2025

Line No.	Function	Darlington NGS	Pickering NGS	Total OPG Nuclear Facilities	DNNP Facilities
		(a)	(b)	(c)	(d)
	Nuclear Stations				
1	Operations & Maintenance	299.7	308.8	608.5	0.0
2	- Operations	111.5	86.3	197.8	
3	- Maintenance	188.2	222.5	410.7	
4	Work Management	23.3	10.5	33.8	
5	Site and Support Services	35.6	51.4	87.0	
6	Tritium Removal Facility	13.4		13.4	
7	**Total Nuclear Stations**	371.9	370.8	742.7	0.0
8	**Operations and Project Support**	287.3	272.6	559.8	0.0
	CRVA Eligible Costs				
9	Fuel Channel Life Extension Project	0.4	0.0	0.4	
10	Pickering Extended Operations		0.0	0.0	
11	Optimization of Pickering Shutdown		0.0	0.0	
12	**Total CRVA Eligible Costs**	0.4	0.0	0.4	0.0
13	**Total Base OM&A**	659.6	643.3	1,303.0	0.0

Notes:

Numbers may not add due to rounding.

Table 8a
Combined Nuclear Base OM&A by Function ($M)
OEB Approved - Calendar Year Ending December 31, 2025

Line No.	Function	Darlington NGS	Pickering NGS	Total OPG Nuclear Facilities	DNNP Facilities
		(a)	(b)	(c)	(d)
	Nuclear Stations				
1	Operations & Maintenance	274.9	252.9	527.8	0.0
2	- Operations	90.4	59.9	150.2	
3	- Maintenance	184.6	193.0	377.6	
4	Work Management	20.0	7.4	27.4	
5	Site and Support Services	37.3	56.7	94.0	
6	Tritium Removal Facility	14.2		14.2	
7	**Total Nuclear Stations**	346.4	317.0	663.4	0.0
8	**Operations and Project Support**	238.5	177.7	416.2	0.0
	CRVA Eligible Costs				
9	Fuel Channel Life Extension Project	0.2	0.3	0.4	
10	Pickering Extended Operations		0.0		
11	Optimization of Pickering Shutdown		0.0		
12	**Total CRVA Eligible Costs**	0.2	0.3	0.4	0.0
13	**Total Base OM&A**	585.0	495.0	1,080.0	0.0

Numbers may not add due to rounding.

Table 9
Combined Nuclear Base OM&A by Function ($M)
Budget - Calendar Year Ending December 31, 2026

Line No.	Function	Darlington NGS	Pickering NGS	Total OPG Nuclear Facilities	DNNP Facilities
		(a)	(b)	(c)	(d)
	Nuclear Stations				
1	Operations & Maintenance	299.6	257.4	557.0	0.0
2	- Operations	105.6	72.7	178.4	
3	- Maintenance	194.0	184.6	378.6	
4	Work Management	21.2	7.6	28.9	
5	Site and Support Services	38.7	40.7	79.4	
6	Tritium Removal Facility	13.8		13.8	
7	**Total Nuclear Stations**	373.3	305.7	679.0	0.0
8	**Operations and Project Support**	282.6	248.6	531.2	3.9
	CRVA Eligible Costs				
9	Fuel Channel Life Extension Project		0.0		
10	Pickering Extended Operations		0.0		
11	Optimization of Pickering Shutdown		0.0		
12	**Total CRVA Eligible Costs**	0.0	0.0	0.0	0.0
13	**Total Base OM&A**	655.9	554.3	1,210.2	3.9

Numbers may not add due to rounding.

Table 9a
Combined Nuclear Base OM&A by Function ($M)
OEB Approved - Calendar Year Ending December 31, 2026

Line No.	Function	Darlington NGS	Pickering NGS	Total OPG Nuclear Facilities	DNNP Facilities
		(a)	(b)	(c)	(d)
	Nuclear Stations				
1	Operations & Maintenance	290.0	0.0	290.0	0.0
2	- Operations	91.1		91.1	
3	- Maintenance	198.8		198.8	
4	Work Management	16.3		16.3	
5	Site and Support Services	37.0		37.0	
6	Tritium Removal Facility	14.5		14.5	
7	**Total Nuclear Stations**	357.7	0.0	357.7	0.0
8	**Operations and Project Support**	264.0	(0.0)	264.0	0.0
	CRVA Eligible Costs				
9	Fuel Channel Life Extension Project	0.0	0.0	0.0	
10	Pickering Extended Operations		0.0	0.0	
11	Optimization of Pickering Shutdown		0.0	0.0	
12	**Total CRVA Eligible Costs**	0.0	0.0	0.0	0.0
13	**Total Base OM&A**	621.7	(0.0)	621.7	0.0

Numbers may not add due to rounding.

Table 10
Combined Nuclear Base OM&A by Function ($M)
Plan - Calendar Year Ending December 31, 2027

Line No.	Function	Darlington NGS	Pickering NGS	Total OPG Nuclear Facilities	DNNP Facilities
		(a)	(b)	(c)	(d)
	Nuclear Stations				
1	Operations & Maintenance	321.4	6.4	327.8	0.0
2	- Operations	110.8	6.4	117.2	
3	- Maintenance	210.6	0.0	210.6	
4	Work Management	32.7	0.0	32.7	
5	Site and Support Services	40.5	1.7	42.2	
6	Tritium Removal Facility	14.4		14.4	
7	**Total Nuclear Stations**	409.0	8.1	417.1	0.0
8	**Operations and Project Support**	299.2	124.1	423.3	4.3
	CRVA Eligible Costs				
9	Fuel Channel Life Extension Project		0.0		
10	Pickering Extended Operations		0.0		
11	Optimization of Pickering Shutdown		0.0		
12	**Total CRVA Eligible Costs**	0.0	0.0	0.0	0.0
13	**Total Base OM&A**	708.2	132.2	840.4	4.3

Numbers may not add due to rounding.

Table 11
Combined Nuclear Base OM&A by Function ($M)
Plan - Calendar Year Ending December 31, 2028

Line No.	Function	Darlington NGS	Pickering NGS	Total OPG Nuclear Facilities	DNNP Facilities
		(a)	(b)	(c)	(d)
	Nuclear Stations				
1	Operations & Maintenance	330.0	13.9	343.9	0.0
2	- Operations	112.0	11.3	123.2	
3	- Maintenance	218.0	2.6	220.6	
4	Work Management	18.9	0.0	18.9	
5	Site and Support Services	42.2	1.7	43.8	
6	Tritium Removal Facility	14.8		14.8	
7	**Total Nuclear Stations**	405.9	15.5	421.4	0.0
8	**Operations and Project Support**	303.9	125.3	429.2	5.0
	CRVA Eligible Costs				
9	Fuel Channel Life Extension Project		0.0		
10	Pickering Extended Operations		0.0		
11	Optimization of Pickering Shutdown		0.0		
12	**Total CRVA Eligible Costs**	0.0	0.0	0.0	0.0
13	**Total Base OM&A**	709.8	140.9	850.7	5.0

Numbers may not add due to rounding.

Table 12
Combined Nuclear Base OM&A by Function ($M)
Plan - Calendar Year Ending December 31, 2029

Line No.	Function	Darlington NGS	Pickering NGS	Total OPG Nuclear Facilities	DNNP Facilities
		(a)	(b)	(c)	(d)
	Nuclear Stations				
1	Operations & Maintenance	348.1	18.0	366.1	0.0
2	- Operations	121.7	14.3	136.0	
3	- Maintenance	226.5	3.7	230.1	
4	Work Management	25.2	0.0	25.2	
5	Site and Support Services	43.3	4.3	47.6	
6	Tritium Removal Facility	15.7		15.7	
7	**Total Nuclear Stations**	432.3	22.3	454.5	0.0
8	**Operations and Project Support**	312.8	131.1	443.9	5.3
	CRVA Eligible Costs				
9	Fuel Channel Life Extension Project		0.0		
10	Pickering Extended Operations		0.0		
11	Optimization of Pickering Shutdown		0.0		
12	**Total CRVA Eligible Costs**	0.0	0.0	0.0	0.0
13	**Total Base OM&A**	745.1	153.4	898.4	5.3

Table 13
Combined Nuclear Base OM&A by Function ($M)
Plan - Calendar Year Ending December 31, 2030

Line No.	Function	Darlington NGS	Pickering NGS	Total OPG Nuclear Facilities	DNNP Facilities
		(a)	(b)	(c)	(d)
	Nuclear Stations				
1	Operations & Maintenance	354.8	15.5	370.3	6.0
2	- Operations	124.1	14.6	138.7	3.3
3	- Maintenance	230.7	0.9	231.6	2.7
4	Work Management	22.5	0.0	22.5	0.4
5	Site and Support Services	44.3	9.2	53.5	11.8
6	Tritium Removal Facility	15.8		15.8	
7	**Total Nuclear Stations**	437.4	24.6	462.1	18.2
8	**Operations and Project Support**	313.4	141.3	454.7	16.1
	CRVA Eligible Costs				
9	Fuel Channel Life Extension Project		0.0		
10	Pickering Extended Operations		0.0		
11	Optimization of Pickering Shutdown		0.0		
12	**Total CRVA Eligible Costs**	0.0	0.0	0.0	0.0
13	**Total Base OM&A**	750.8	166.0	916.8	34.4

Numbers may not add due to rounding.

Table 14
Combined Nuclear Base OM&A by Function ($M)
Plan - Calendar Year Ending December 31, 2031

Line No.	Function	Darlington NGS	Pickering NGS	Total OPG Nuclear Facilities	DNNP Facilities
		(a)	(b)	(c)	(d)
	Nuclear Stations				
1	Operations & Maintenance	366.3	187.4	553.7	35.6
2	- Operations	128.6	67.1	195.7	22.0
3	- Maintenance	237.7	120.3	358.0	13.6
4	Work Management	19.2	11.1	30.2	3.0
5	Site and Support Services	45.7	57.2	102.9	27.5
6	Tritium Removal Facility	16.5		16.5	
7	**Total Nuclear Stations**	447.6	255.6	703.3	66.1
8	**Operations and Project Support**	318.1	204.0	522.2	52.9
	CRVA Eligible Costs				
9	Fuel Channel Life Extension Project		0.0		
10	Pickering Extended Operations		0.0		
11	Optimization of Pickering Shutdown		0.0		
12	**Total CRVA Eligible Costs**	0.0	0.0	0.0	0.0
13	**Total Base OM&A**	765.8	459.7	1,225.4	119.0

COMPARISON OF NUCLEAR BASE AND DNNP OPERATIONAL READINESS OM&A COSTS

1.0 PURPOSE

This evidence presents period-over-period comparisons of Base OM&A costs for OPG's nuclear facilities (2020-2031) and Darlington New Nuclear Program ("DNNP") facilities, and DNNP Operational Readiness OM&A costs (2026-2031), and supports the approval of these costs presented in Ex. F2-2-1.

Where applicable, OPG has restated the presentation of actual (2020-2024) and EB-2020-0290 Nuclear OEB-approved (2022-2026) Nuclear Stations and Operations and Project Support costs for subsequent organizational changes including transfers to/from Support Services organization to provide an appropriate basis of comparison with the forecast period information. These transfers are further described in Ex. A1-4-1, Attachment 2.

Period-over-period changes by functional group (Nuclear Stations, Operations and Project Support and Capacity Refurbishment Variance Account ("CRVA") Eligible[1] for nuclear facilities are presented in Ex. F2-2-2, Table 1a and 1b.

Period-over-period changes by functional group (Nuclear Stations, Operations and Project Support) for DNNP facilities and Operational Readiness costs are presented in Ex. F2-2-2, Table 1c.

All comparisons to OEB-approved amounts are before any settlement or OEB disallowances adjustments.

Net reportable variances and period-over-period changes by category of expense (10% or greater at the function level subject to a minimum materiality limit of $1.0M), are discussed below. Key drivers of variance are identified.

[1] The CRVA is discussed in Ex. H1-1-1, Section 5.6.

2.0 PERIOD-OVER-PERIOD CHANGES – IR TERM, OPG NUCLEAR FACILITIES

2027 Plan versus 2026 Budget

Planned Base OM&A costs in 2027 are $840.4M, which is $369.8M or 30.6% lower than the 2026 planned Base OM&A costs of $1,210.2M. The variance is attributable to Nuclear Stations ($261.9M or 38.6% decrease) and Operations and Project Support ($107.9M or 20.3% decrease).

The negative reportable variances by category of expense for the Nuclear Stations and Operations and Project Support functional groups are driven by Pickering Units 5-8 entering into the refurbishment outage.

In addition to the above, the reportable variances by category of expense are as follows:

- Work Management ($3.8M or 13.2% increase): primarily due to the T2601 Tritium Removal Facility ("TRF") outage in 2027.

2028 Plan versus 2027 Plan

Planned Base OM&A costs are 2028 is $850.7M, which is $10.3M or 1.2% higher than the 2027 planned Base OM&A costs of $840.4M. The variance is attributable to Operations and Project Support ($5.9M or 1.4% increase), and Nuclear Stations ($4.4M or 1.0% increase).

The reportable variance by category of expense is as follows:

- Work Management ($13.7M or 42.0% decrease): primarily due to having no TRF outages in 2028.

2029 Plan versus 2028 Plan

Planned Base OM&A costs in 2029 are $898.4M, which is $47.8M or 5.6% higher than the 2028 planned Base OM&A costs of $850.7M. The variance is attributable to Nuclear Stations ($33.1M or 7.9% increase) and Operations and Project Support ($14.7M or 3.4% increase). The higher OM&A costs include the impact of the 53rd fiscal week in 2029.[2]

[2] Annual labour cost budgets are calculated on a weekly basis times the number of weeks in the fiscal calendar year; most years have 52 weeks, but some years, like 2029, have 53 numbered weeks.

In addition to the above, the reportable variances by category of expense are as follows:

- Work Management ($6.2M or 32.8% increase): primarily due to the T2901 TRF outage in 2029.

2030 Plan versus 2029 Plan

Planned Base OM&A costs in 2030 are $916.8M, which is $18.4M or 2.0% higher than the 2029 planned Base OM&A costs of $898.4M. The variance is attributable to Operations and Project Support ($10.8M or 2.4% increase) and Nuclear Stations ($7.5M or 1.7% increase), which includes the impact of the 53rd week in 2029 and not in 2030.

In addition to the above, the reportable variances by category of expense are as follows:

- Work Management ($2.7M or 10.7% decrease): primarily due to lower costs in 2030 from the completion of the T2901 TRF outage which commences in 2029.
- Site and Support Services ($5.9M or 12.3% increase): primarily due to the extended training period required for nuclear operators and chemical technicians to prepare for the return to service of Pickering Unit 5.

2031 Plan versus 2030 Plan

Planned Base OM&A costs in 2031 are $1,225.4M, which is $308.6M or 33.7% higher than the 2030 planned Base OM&A costs of $916.8M. The variance is attributable to Nuclear Stations ($241.2M or 52.2% increase) and Operations and Project Support ($67.4M or 14.8% increase), reflecting the return to service of Pickering Unit 5 in May 2031.

The reportable variances by category of expense for the Nuclear Stations and Operations and Project Support functional groups are primarily driven by the return to service of Unit 5 at Pickering.

3.0 PERIOD-OVER-PERIOD CHANGES – BRIDGE YEARS

2026 Budget versus 2026 OEB-Approved

Planned Base OM&A costs in 2026 are $1,210.2M, which is $588.5M or 94.7% higher than the 2026 OEB-approved budget of $621.7M. The variance is attributable to Nuclear Stations

($321.3M or 89.8% increase) and Operations and Project Support ($267.2M or 101.2% increase).

The reportable variances are largely due to Pickering Units 5-8 not ending commercial operation in 2025 as was assumed in EB-2020-0290. In addition, all Station and Operations and Project Support organizations were impacted by higher labour cost escalation than forecasted in EB-2020-0290, reflecting collective bargaining process outcomes including as a result of the repeal of the *Protecting a Sustainable Public Sector for Future Generations Act, 2019* ("Bill 124"), as discussed in Ex. F4-3-1.

2026 Budget versus 2025 Budget

Planned Base OM&A costs in 2026 are $1,210.2M, which is $92.8M or 7.1% lower than the 2025 planned Base OM&A costs of $1,303.0M. The variance is primarily attributable to Nuclear Stations ($63.7M or 8.6% decrease) and Operations and Project Support ($28.6M or 5.1% decrease). This largely reflects Pickering Unit 5-8 operating for 12 months in 2025 compared to nine months in 2026, before entering into the refurbishment outage.

In addition to the above, the reportable variances by category of expense are as follows:

- Work Management ($5.0M or 14.7% decrease): primarily due to costs incurred in 2025 for the completion of the T2401 TRF outage.
- Environment, Health & Safety ("EHS") ($2.4M or 20.6% increase): primarily due to increased support required for environmental and compliance programs in accordance with environmental legislation (Ex. A1-6-1, Section 9.0), including stormwater sampling at Pickering to support environmental risk assessments, biodiversity initiatives and environmental monitoring, and *Fisheries Act* Authorizations.
- Enterprise Projects ($3.7M or 28.1% decrease): primarily due to reduced station operations support at both Darlington and Pickering, partially offset by work undertaken for the Enterprise-Wide Project Excellence Initiatives (Ex. D2-1-1, Section 3.5) to strengthen project management.

2025 Budget versus 2025 OEB-Approved

Planned Base OM&A costs in 2025 are $1,303.0M, which is $223.0M or 24.4% higher than the 2025 OEB-approved budget of $1,080.0M. The variance is attributable to Operations and Project Support ($143.6M or 34.5% increase) and Nuclear Stations ($79.4M or 12.0% increase). All Nuclear Stations and Operations and Project Support Functions were impacted by higher labour cost escalation than forecasted in EB-2020-0290, reflecting collective bargaining process outcomes including as a result of the repeal of Bill 124, as discussed in Ex. F4-3-1.

The reportable variances by category of expenses are as follows and are inclusive of the aforementioned higher labour cost escalation, with additional drivers of variance identified below where applicable:

- Operations ($47.5M or 31.6% increase): primarily due to higher staffing levels as a result of Pickering Units 5-8 not ending commercial operation in 2025, including the hiring of additional Nuclear Operators in Training, bulk chemical costs price increases (e.g. helium), and the operation of the demineralized water treatment plant at Darlington for which Base OM&A costs were not included in the plan underpinning EB-2020-0290 (Ex. D2-1-3, Section 3.1.3).
- Work Management ($6.5M or 23.6% increase): primarily due to higher staffing levels to support Pickering operations to September 2026.
- Enterprise Engineering ($51.6M or 27.5% increase): primarily as a result of Pickering Units 5-8 not ending commercial operation in 2025. Throughout the refurbishment period and post refurbishment, Enterprise Engineering will complete critical activities such as improved monitoring, inspections, calibrations and technical assessments to address maintenance needs, and sustain equipment performance and reliability.
- Integrated Fleet Management ($73.1M or 56.1% increase): primarily as a result of Pickering Units 5-8 not ending commercial operation in 2025. Throughout the refurbishment period and post refurbishment, work performed includes continued specialized training programs in maintenance, engineering and operations for maintaining necessary qualifications for safe and reliable operations, as well as incremental support in Security Services to comply with Canadian Nuclear Safety Commission requirements.

- Enterprise Projects ($1.9M or 16.9% increase): primarily due to work undertaken for the Enterprise-Wide Project Excellence Initiatives (Ex. D2-1-1, Section 3.5) to strengthen project management, and increased station operations support.
- Other Support ($13.7M or 19.8% increase): primarily due to higher staffing levels in Nuclear Regulatory Affairs as a result of Pickering Units 5-8 not ending commercial operation in 2025 and in Energy Markets to ensure transfer of critical knowledge and skillsets due to expected attrition.
- Low and Intermediate Level Waste ($4.4M or 90.9% increase): due to higher costs rates following the year-end 2021 asset retirement obligation adjustment reflecting the 2022-2026 Ontario Nuclear Funds Agreement ("ONFA") Reference Plan that was implemented subsequent to EB-2020-0290.

2025 Budget versus 2024 Actual

Planned Base OM&A costs in 2025 are $1,303.0M, which is $130.5M or 9.1% lower than the 2024 actual amount of $1,433.5M. The variance is attributable to Nuclear Stations ($87.5M or 10.5% decrease), Operations and Project Support ($40.6M or 6.8% decrease) and CRVA Eligible Costs ($2.4M or 85.2% decrease). The negative reportable variances by category of expense for the Nuclear Station and Operations and Project Support functional groups are largely driven by the permanent shutdown of Pickering Units 1 and 4 in 2024 and the impact of the 53rd week in 2024 and not in 2025.

In addition to the above, the reportable variances by category of expense are as follows:

- TRF ($1.7M or 14.4% increase): primarily due to higher staffing levels from previously unfilled vacancies.
- Optimization of Pickering Shutdown ($3.0M or 100% decrease): due to completion of this work program in 2024.

4.0 PERIOD-OVER-PERIOD CHANGES – HISTORICAL YEARS

2024 Actual versus 2024 OEB-Approved

Actual Base OM&A costs in 2024 were $1,433.5M, which is $122.3M or 9.3% higher than the 2024 OEB-approved budget of $1,311.2M. The variance is attributable to Nuclear Stations

($58.9M or 7.6% increase), Operations and Project Support ($66.2M or 12.4% increase), partially offset by CRVA Eligible Costs ($2.8M or 49.5% decrease). All Nuclear Stations and Operations and Project Support Functions were impacted by higher labour cost escalation than forecasted in EB-2020-0290, reflecting collective bargaining process outcomes including as a result of the repeal of Bill 124, as discussed in Ex. F4-3-1.

The reportable variances by category of expenses are as follows and are inclusive of the aforementioned higher labour cost escalation, with additional drivers of variance identified below where applicable:

- Operations ($30.5M or 15.7% increase): primarily due to higher staffing levels as a result of Pickering Units 5-8 not ending commercial operation in 2025 including the hiring of additional Nuclear Operators in Training, bulk chemical costs price increases (e.g. helium), and the operation of the demineralized water treatment plant at Darlington for which Base OM&A costs were not included in the plan underpinning EB-2020-0290 (Ex. D2-1-3, Section 3.1.3).
- Work Management ($6.5M or 21.7% increase): primarily due to the T2401 (previously named T2301 in EB-2020-0290) TRF outage being shifted to a 2024 start date.
- TRF ($3.4M or 22.7% decrease): primarily due to lower than planned staffing levels, due to more resources supporting the provision of third-party detritiation services.
- Integrated Fleet Management ($32.4M or 17.1% increase): primarily due to higher staffing levels for Training and Security and Emergency Services to support regulatory requirements and continued specialized training and as a result of Pickering Units 5-8 not ending commercial operation in 2025, and higher non-labour costs for tactical review needs assessment, strategic oversight, and evaluation of existing programs.
- Enterprise Projects ($2.9M or 21.3% increase): primarily due to work undertaken for the Enterprise-Wide Project Excellence Initiatives (Ex. D2-1-1, Section 3.5) to strengthen project management.
- Low and Intermediate Level Waste ($6.0M or 108.2% increase): due to higher costs rates following the year-end 2021 asset retirement obligation (“ARO”) adjustment reflecting the 2022-2026 ONFA Reference Plan.

- Optimization of Pickering Shutdown ($1.8M or 38.2% decrease): due to the winding down of the Periodic Safety Review program, in advance of completion of this work program.

2024 Actual versus 2023 Actual

Actual Base OM&A costs in 2024 were $1,433.5M, which was $14.6M or 1.0% higher than the 2023 actual amount of $1,418.9M. The variance is attributable to Operations and Project Support ($45.6M or 8.2% increase), CRVA Eligible Costs ($0.3M or 12.9% increase), partially offset by Nuclear Stations ($31.4M or 3.6% decrease). All Nuclear Stations and Operations and Project Support Functions were impacted by higher labour cost escalation in 2024 reflecting collective bargaining process outcomes including as a result of Bill 124, as discussed in Ex. F4-3-1. Another contributor to the increase in base OM&A is the impact of the 53rd fiscal week in 2024.

The reportable variances by category of expenses are as follows and are inclusive of the aforementioned higher labour cost escalation, with additional drivers of variance identified below where applicable:

- Work Management ($5.2M or 16.6% increase): due to the T2401 TRF outage (previously named T2301 in EB-2020-0290) being shifted to a 2024 start date.
- Site and Support Services ($31.0M or 24.6% decrease): due to an increased stores inventory obsolescence adjustment for Pickering in 2023.
- Integrated Fleet Management ($33.3M or 17.7% increase): due to Training and Security and Emergency Services related costs for additional staffing to support regulatory requirements and higher non-labour costs for tactical review needs assessment, strategic oversight, and evaluation of existing programs.
- Fuel Channel Life Extension Project ($1.3M or 112.7% decrease): due to the winding down of this work program.
- Optimization of Pickering Shutdown ($1.6M or 115.2% increase): due to the ongoing work program schedule related to the Periodic Safety Review.

2023 Actual versus 2023 OEB-Approved

Actual Base OM&A costs in 2023 were $1,418.9M, which was $94.3M or 7.1% higher than the

2023 OEB-approved budget of $1,324.6M. The variance is attributable to Nuclear Stations ($73.3M or 9.3% increase) and Operations and Project Support ($25.4M or 4.8% increase), partially offset by CRVA Eligible Costs ($4.4M or 63.8% decrease). All Nuclear Stations and Operations and Project Support Functions were impacted by higher labour cost escalation than forecasted in EB-2020-0290, reflecting collective bargaining process outcomes including as a result of the repeal of Bill 124, as discussed in Ex. F4-3-1.

The reportable variances by category of expenses are as follows and are inclusive of the aforementioned higher labour cost escalation, with additional drivers of variance identified below where applicable:

- Site and Support Services ($25.3M or 25.1% increase): primarily due to a stores inventory obsolescence adjustment for Pickering in 2023.
- TRF ($2.8M or 19.3% decrease): due to lower than planned staffing levels, due to more resources supporting the provision of third-party detritiation services.
- Enterprise Projects ($2.1M or 14.7% increase): primarily due to increased station operations support.
- Low and Intermediate Level Waste ($7.2M or 139.3% increase): due to higher costs rates following the year-end 2021 ARO adjustment reflecting the 2022-2026 ONFA Reference Plan.
- Fuel Channel Life Extension Ongoing ($3.1M or 73.6% decrease): primarily due to the start of the winding down of this work program.
- Optimization of Pickering Shutdown ($1.3M or 48.1% decrease): due to the ongoing work program schedule related to the Periodic Safety Review.

2023 Actual versus 2022 Actual

Actual Base OM&A costs in 2023 were $1,418.9M, which were $113.2M or 8.7% higher than the 2022 actual amount of $1,305.7M. The variance is attributable to Nuclear Stations ($73.9M or 9.4% increase) and Operations and Project Support ($48.2M or 9.5% increase). All Nuclear Stations and Operations and Project Support Functions were impacted by higher labour cost escalation in 2023 reflecting collective bargaining process outcomes including as a result of the repeal of Bill 124, as discussed in Ex. F4-3-1.

The reportable variances by category of expenses are as follows and are inclusive of the aforementioned higher labour cost escalation, with additional drivers of variance identified below where applicable:

- Maintenance ($48.8M or 11.4% increase): primarily driven by increased forced outage days, emergent repairs at Pickering and higher non-labour costs (e.g. materials and service contracts).
- Work Management ($9.6M or 23.5% decrease): primarily due to no TRF outages taking place in 2023.
- Site and Support Services ($22.6M or 21.8% increase): primarily due to a stores inventory obsolescence adjustment for Pickering in 2023.
- Enterprise Engineering ($26.7M or 12.4% increase): primarily due to higher staffing levels due to previously unfilled vacancies and to address attrition risks, and emergent CNSC assessment requests.
- EHS ($2.1M or 13.0% decrease): primarily due to COVID-19 related costs including procurement of personal protective equipment and testing not planned in EB-2020-0290.
- Other Support ($14.1M or 20.9% increase): primarily due to a cycle count provision for inventory and higher regulatory licensing fees due to a refund received in 2022.
- Low and Intermediate Level Waste ($4.0M or 24.3% decrease): due to lower waste volumes at the Darlington station.
- Fuel Channel Life Extension Ongoing ($8.6M or 88.3% decrease): due to completion of Darlington Unit 3 spacer retrieval and analysis work in 2022.

2022 Actual versus 2022 OEB-Approved

Actual Base OM&A costs in 2022 were $1,305.7M, which was $28.3M or 2.1% lower than the 2022 OEB-approved budget of $1,334.0M. The variance is attributable to Operations and Project Support ($21.4M, or 4.1% decrease) and Nuclear Stations ($6.6M or 0.8% decrease).

The reportable variances by category of expense are as follows:

- Work Management ($7.0M or 20.8% increase): primarily due to the T2101 TRF outage that was shifted to a 2022 start date from 2021.

- TRF ($3.1M or 21.1% decrease): primarily due to lower than planned staffing levels, due to more resources supporting the provision of third-party detritiation services.
- EHS ($2.6M or 19.1% increase): primarily due to COVID-19 related costs, including procurement of personal protective equipment and testing not planned in EB-2020-0290.
- Enterprise Projects ($2.9M or 19.3% increase): primarily due to increased station operations support.
- Low and Intermediate Level Waste ($11.5M or 241.9% increase): due to higher costs rates following the year-end 2021 ARO adjustment reflecting the 2022-2026 ONFA Reference Plan, partially offset by lower waste volumes.
- Fuel Channel Life Extension Ongoing ($3.8M or 64.5% increase): due to the completion of the Darlington Unit 3 spacer retrieval and analysis work, which was projected to be completed in 2021 in EB-2020-0290.
- Optimization of Pickering Shutdown ($4.2M or 71.6% decrease): due to the ongoing work program schedule related to the Periodic Safety Review.

2022 Actual versus 2021 Actual

Actual Base OM&A costs in 2022 were $1,305.7M, which was $10.3M or 0.8% lower than the 2021 actual amount of $1,316.0M. The decrease is attributable to Nuclear Stations ($7.6M or 1.0% decrease) and CRVA Eligible Costs ($3.6M or 23.9% decrease).

The reportable variances by category of expense are as follows:

- Work Management ($5.7M or 16.4% increase): primarily due to the T2101 TRF outage that was shifted from a 2021 start date to 2022.
- TRF ($3.0M or 20.6% decrease): primarily due to lower than planned staffing levels, due to more resources supporting the provision of third-party detritiation services.
- EHS ($5.9M or 27.0% decrease): primarily due to COVID-19 related costs, including procurement of personal protective equipment and testing.
- Low and Intermediate Level Waste ($9.5M or 142.1% increase): due to higher costs rates following the year-end 2021 ARO adjustment reflecting the 2022-2026 ONFA Reference Plan.
- Fuel Channel Life Extension Ongoing ($1.0M or 11.9% increase): due to the timing of the

Darlington Unit 3 spacer retrieval and analysis work.

- Pickering Extended Operations Enabling Costs ($5.4M or 99.3% decrease): due to the completion of this program in 2021.

2021 Actual versus 2021 OEB-Approved

Actual Base OM&A costs in 2021 were $1,316.0M, which was $53.5M or 3.9% lower than the 2021 OEB-approved amount of $1,369.5M. The increase is attributable to Nuclear Stations ($32.8M or 4.0% decrease), Operations and Project Support ($29.7M or 5.5% decrease) and CRVA Eligible Costs ($9.0M or 149.5% increase).

The reportable variances by category of expense are as follows:

- TRF ($1.9M or 15.4% increase): primarily due to increased TRF operation costs.
- Enterprise Engineering ($35.3M or 14.4% decrease): primarily due to lower than planned staffing levels and purchased service costs.
- EHS ($5.9M or 37.3% increase): primarily due to COVID-19 related costs, including procurement of personal protective equipment and testing not planned in EB-2016-0152.
- Enterprise Projects ($3.8M or 29.3% increase): primarily due to the ongoing work on the Enterprise-Wide Project Excellence Initiatives (Ex. D2-1-1, Section 3.5) to strengthen project management.
- Fuel Channel Life Extension Ongoing ($2.7M or 44.5% increase): primarily due to timing related to the Darlington Unit 3 spacer retrieval and analysis work.
- Pickering Extended Operations Enabling Costs ($5.4M increase from $0): primarily due to reclassification of these expenditures from outage OM&A costs and project OM&A costs to Base OM&A costs. Total Pickering Extended Operations initiative was completed in 2023 within its budget of $307M.

2021 Actual versus 2020 Actual

Actual Base OM&A costs in 2021 were $1,316.0M which was $2.1M or 0.2% higher than the 2020 actual amount of $1,313.9M. The increase was attributable to Nuclear Stations ($11.4M or 1.5% increase), partially offset by Operations and Project Support ($8.7M or 1.7% decrease).

The reportable variances by category of expense are as follows:

- Site and Support Services ($12.6M or 13.6% increase): primarily due to increased stores inventory obsolescence adjustments.
- TRF ($3.0M or 26.5% increase): primarily due to increased TRF operation costs.
- EHS ($3.9M or 21.5% increase): primarily due to COVID-19 related costs, including procurement of personal protective equipment and testing.
- Pickering Extended Operations Enabling Costs ($1.8M or 24.9% decrease): due to the completion of this work program in 2021.

2020 Actual versus 2020 OEB-Approved

Actual Base OM&A costs in 2020 were $1,313.9M which was $43.0M or 3.2% lower than the 2020 OEB-approved amount of $1,356.8M. The increase was attributable to Nuclear Stations ($40.7M or 4.9% decrease) and Operations and Project Support ($11.9M or 2.3% decrease), partially offset by CRVA Eligible Costs ($9.6M or 159.4% increase).

The reportable variances by category of expense are as follows:

- Work Management ($5.9M or 14.8% decrease), primarily due to lower than planned support staff at Pickering, and moving the TRF Cryogenic Refrigeration System outage scope to the T2101 outage.
- Site and Support Services ($11.6M or 11.1% decrease), primarily due to lower than planned work programs that support the stations.
- Environment, Health & Safety ($2.7M or 17.4% increase), primarily due to COVID-19 related costs, including procurement of personal protective equipment and testing.
- Low and Intermediate Level Waste ($1.3M or 23.0% increase), due to higher costs rates following the year-end 2021 AROadjustment reflecting the 2022-2026 ONFA Reference Plan.
- Fuel Channel Life Extension Ongoing ($1.8M or 30.0% increase), primarily due to additional Darlington spacer retrieval and analysis work.
- Pickering Extended Operations Enabling Costs ($7.2M increase from $0) primarily due to reclassification of these expenditures from Outage OM&A costs and Project OM&A costs to Base OM&A costs.

5.0 PERIOD-OVER-PERIOD CHANGES – IR TERM, DNNP FACILITIES

2027 Plan versus 2026 Budget

DNNP Facilities Base OM&A

Planned Base OM&A costs in 2027 are $4.3M, which is $0.5M or 11.6% higher than the 2026 planned Base OM&A costs of $3.9M. The variance is attributable to Operations and Project Support ($0.5M or 11.6% increase).

There are no reportable variances by category during this timeframe.

DNNP Operational Readiness OM&A

Planned OM&A costs in 2027 are $45.9M, which is $17.1M or 59.5% higher than the 2026 planned OM&A costs of $28.8M.

The reportable variance is driven by the hiring and training of future Operations staff and support required to plan the operations and management of the DNNP Unit 1 as the commercial in-service date approaches.

2028 Plan versus 2027 Plan

DNNP Facilities Base OM&A

Planned Base OM&A costs in 2028 are $5.0M, which is $0.7M or 15.8% higher than the 2027 planned Base OM&A costs of $4.3M. The variance is attributable to Operations and Project Support ($0.7M or 15.8% increase).

There are no reportable variances by category during this timeframe.

DNNP Operational Readiness OM&A

Planned OM&A costs in 2028 are $46.3M, which is $0.4M or 0.9% higher than the 2027 planned OM&A costs of $45.9M.

There are no reportable variances during this timeframe.

2029 Plan versus 2028 Plan

DNNP Facilities Base OM&A

Planned Base OM&A costs in 2029 are $5.3M, which is $0.3M or 6.4% higher than the 2028 planned Base OM&A costs of $5.0M. The variance is attributable to Operations and Project Support ($0.3M or 6.4% increase).

There are no reportable variances by category during this timeframe.

DNNP Operational Readiness OM&A

Planned OM&A costs in 2029 are $40.0M, which is $6.4M or 13.7% lower than the 2028 planned OM&A costs of $46.3M.

The reportable variance is driven by staff transitioning from supporting operational readiness to commissioning, funded by the DNNP.

2030 Plan versus 2029 Plan

DNNP Facilities Base OM&A

Planned Base OM&A costs in 2030 are $34.4M, which is $29.0M or 545.1% higher than the 2029 planned Base OM&A costs of $5.3M. The variance is attributable to Nuclear Stations ($18.2M or 100.0% increase) and Operations and Project Support ($10.8M or 202.7% increase).

The reportable variances by category of expense for the Nuclear Stations and Operations and Project Support functional groups are driven by DNNP Unit 1 entering commercial service in October 2030.

DNNP Operational Readiness OM&A

Planned OM&A costs in 2030 are $40.2M, which is $0.3M or 0.7% higher than the 2029 planned OM&A costs of $40.0M.

There are no reportable variances during this timeframe.

2031 Plan versus 2030 Plan

DNNP Facilities Base OM&A

Planned Base OM&A costs in 2031 are $119.0M, which is $84.6M or 246.1% higher than the 2030 planned Base OM&A costs of $34.4M. The variance is attributable to Nuclear Stations ($47.8M or 262.3% increase) and Operations and Project Support ($36.7M or 227.8% increase).

The reportable variances by category of expense for the Nuclear Stations and Operations and Project Support functional groups are driven by a full year of commercial operation for DNNP Unit 1 compared to less than three months of commercial operation in 2030.

DNNP Operational Readiness OM&A

Planned OM&A costs in 2031 are $0.0M, which is $40.2M or 100.0% lower than the 2030 planned OM&A costs of $40.2M.

The reportable variance is driven by conclusion of operational readiness for DNNP Unit 1.

Numbers may not add due to rounding.

Table 1a

Comparison of OPG Nuclear Facilities Base OM&A by Function ($M)[1, 2]

Line No.	Business Unit	2020 OEB Approved	(c)-(a) Change	2020 Actual	(g)-(c) Change	2021 OEB Approved	(g)-(e) Change	2021 Actual	(k)-(g) Change	2022 OEB Approved	(k)-(i) Change	2022 Actual
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	Nuclear Stations											
1	Operations & Maintenance	667.8	(22.3)	645.5	(5.2)	670.1	(29.8)	640.2	(8.2)	645.8	(13.8)	632.1
2	- Operations	226.8	(12.0)	214.8	(5.8)	222.5	(13.5)	208.9	(6.8)	206.5	(4.4)	202.1
3	- Maintenance	441.0	(10.3)	430.7	0.6	447.6	(16.3)	431.3	(1.4)	439.3	(9.3)	430.0
4	Work Management	40.0	***(5.9)***	34.1	1.0	37.8	(2.8)	35.0	***5.7***	33.7	***7.0***	40.8
5	Site and Support Services	104.5	***(11.6)***	93.0	***12.6***	107.6	(2.0)	105.6	(2.2)	100.2	3.2	103.4
6	Tritium Removal Facility	12.2	(0.8)	11.4	***3.0***	12.5	***1.9***	14.4	***(3.0)***	14.5	***(3.1)***	11.4
7	**Total Nuclear Stations**	824.5	(40.7)	783.9	11.4	828.0	(32.8)	795.2	(7.6)	794.2	(6.6)	787.7
	Operations and Project Support											
8	Enterprise Engineering	236.8	(19.6)	217.2	(7.9)	244.5	***(35.3)***	209.3	6.4	231.1	(15.4)	215.7
9	Integrated Fleet Management	185.0	3.2	188.2	(9.2)	188.5	(9.5)	178.9	(5.4)	190.3	(16.8)	173.6
10	Environment, Health & Safety	15.3	***2.7***	18.0	***3.9***	15.9	***5.9***	21.9	***(5.9)***	13.4	***2.6***	16.0
11	Enterprise Projects	14.9	0.6	15.5	1.4	13.1	***3.8***	16.9	0.8	14.9	***2.9***	17.7
12	Other Support	68.7	(0.0)	68.7	3.4	67.6	4.5	72.1	(4.7)	73.6	(6.2)	67.4
13	Low and Intermediate Level Waste	5.6	***1.3***	6.9	(0.2)	5.8	0.9	6.7	***9.5***	4.8	***11.5***	16.3
14	**Total Operations and Project Support**	526.3	(11.9)	514.4	(8.7)	535.4	(29.7)	505.8	0.9	528.0	(21.4)	506.6
	CRVA Eligible Costs											
15	Fuel Channel Life Extension Project	6.0	***1.8***	7.8	0.9	6.0	***2.7***	8.7	***1.0***	5.9	***3.8***	9.7
16	Pickering Extended Operations	0.0	***7.2***	7.2	***(1.8)***	0.0	***5.4***	5.4	***(5.4)***	0.0	0.0	0.0
17	Pickering Optimization of Shutdown	0.0	0.5	0.5	0.3	0.0	0.9	0.9	0.8	5.8	***(4.2)***	1.7
18	**Total CRVA Eligible Costs**	6.0	***9.6***	15.6	(0.6)	6.0	***9.0***	15.0	***(3.6)***	11.7	(0.3)	11.4
19	**Total Base OM&A Before Adjustments**	1,356.8	(43.0)	1,313.9	2.1	1,369.5	(53.5)	1,316.0	(10.3)	1,334.0	(28.3)	1,305.7
20	**OEB/Settlement Adjustments**[3,4]	(56.1)	***56.1***	0.0	0.0	(56.2)	***56.2***		0.0	(40.0)	***40.0***	
21	**Total Base OM&A Including Adjustments**	1,300.7	13.2	1,313.9	2.1	1,313.2	2.8	1,316.0	(10.3)	1,294.0	11.7	1,305.7

Line No.	Business Unit	2022 Actual	(e)-(a) Change	2023 OEB Approved	(e)-(c) Change	2023 Actual	(i)-(e) Change	2024 OEB Approved	(i)-(g) Change	2024 Actual	(k)-(i) Change	2025 Budget
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	Nuclear Stations											
22	Operations & Maintenance	632.1	60.5	638.9	53.7	692.5	(5.4)	630.0	57.2	687.2	***(78.7)***	608.5
23	- Operations	202.1	11.7	195.0	18.7	213.8	11.1	194.3	***30.5***	224.8	***(27.1)***	197.8
24	- Maintenance	430.0	***48.8***	443.8	34.9	478.8	(16.4)	435.7	26.7	462.4	***(51.6)***	410.7
25	Work Management	40.8	***(9.6)***	34.0	(2.8)	31.2	***5.2***	29.9	***6.5***	36.4	(2.6)	33.8
26	Site and Support Services	103.4	***22.6***	100.7	***25.3***	126.0	***(31.0)***	96.3	(1.4)	94.9	(7.9)	87.0
27	Tritium Removal Facility	11.4	0.5	14.7	***(2.8)***	11.9	(0.2)	15.1	***(3.4)***	11.7	***1.7***	13.4
28	**Total Nuclear Stations**	787.7	73.9	788.2	73.3	861.6	(31.4)	771.3	58.9	830.2	***(87.5)***	742.7
	Operations and Project Support											
29	Enterprise Engineering	215.7	***26.7***	229.8	12.7	242.5	10.5	236.0	16.9	253.0	(13.5)	239.4
30	Integrated Fleet Management	173.6	15.0	192.2	(3.6)	188.5	***33.3***	189.5	***32.4***	221.9	(18.5)	203.3
31	Environment, Health & Safety	16.0	***(2.1)***	13.4	0.5	13.9	(0.4)	13.2	0.3	13.5	***(1.7)***	11.8
32	Enterprise Projects	17.7	(1.6)	14.1	***2.1***	16.1	0.3	13.5	***2.9***	16.4	***(3.3)***	13.2
33	Other Support	67.4	***14.1***	74.8	6.6	81.5	2.6	76.5	7.6	84.1	(1.2)	82.9
34	Low and Intermediate Level Waste	16.3	***(4.0)***	5.1	***7.2***	12.3	(0.8)	5.5	***6.0***	11.5	***(2.3)***	9.2
35	**Total Operations and Project Support**	506.6	48.2	529.4	25.4	554.8	45.6	534.2	***66.2***	600.4	(40.6)	559.8
	CRVA Eligible Costs											
36	Fuel Channel Life Extension Project	9.7	***(8.6)***	4.3	***(3.1)***	1.1	***(1.3)***	0.8	(0.9)	(0.1)	0.6	0.4
37	Pickering Extended Operations	0.0	(0.0)	0.0	0.0	0.0	(0.0)	0.0	0.0	0.0	(0.0)	0.0
38	Optimization of Pickering Shutdown	1.7	(0.3)	2.7	***(1.3)***	1.4	***1.6***	4.8	***(1.8)***	3.0	***(3.0)***	0.0
39	**Total CRVA Eligible Costs**	11.4	***(8.9)***	7.0	***(4.4)***	2.5	0.3	5.6	***(2.8)***	2.8	***(2.4)***	0.4
40	**Total Base OM&A Before Adjustments**	1,305.7	113.2	1,324.6	94.3	1,418.9	14.6	1,311.2	122.3	1,433.5	(130.5)	1,303.0
41	**OEB/Settlement Adjustments**[3,4]		0.0	(39.7)	***39.7***		0.0	(39.3)	***39.3***		0.0	
42	**Total Base OM&A Including Adjustments**	1,305.7	113.2	1,284.8	***134.0***	1,418.9	14.6	1,271.8	***161.6***	1,433.5	(130.5)	1,303.0

Notes:

1 Bold italic font indicates variance of 10% or greater.

2 All 2020-2026 amounts (within the Actual, Budget, and OEB Approved columns) have been restated for Nuclear organizational changes and transfers from Corporate Support (See Ex. A1-4-1, Att. 2 and Ex. F2-2-1, Att. 1).

3 OEB Adjustments to approved values in 2020-2021 include the annual disallowance of $25M for nuclear base OM&A (EB-2016-0152 Decision and Order, p. 55) and the annual $30M disallowed in compensation (EB-2016-0152 Decision and Order, p. 84). OEB adjusted values also include adjustments to low and intermediate level waste management variable expenses (EB-2016-0152 Payment Amounts Order, App. A Table 1a/2a/3a/4a/5a, note 5b and per Ex. N1).

4 Per EB-2020-0290 OEB Decision and Order, Schedule A, p. 25, nuclear base OM&A costs are reduced by 3% per year over the 2022-2026 period.

Table 1b
Comparison of OPG Nuclear Facilities Base OM&A by Function ($M)[1, 2]

Line No.	Business Unit	2025 OEB Approved	(c)-(a) Change	2025 Budget	(g)-(c) Change	2026 OEB Approved	(g)-(e) Change	2026 Budget	(i)-(g) Change	2027 Plan	(k)-(i) Change	2028 Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	Nuclear Stations											
43	Operations & Maintenance	527.8	***80.7***	608.5	(51.5)	290.0	***267.0***	557.0	***(229.1)***	327.8	16.0	343.9
44	- Operations	150.2	***47.5***	197.8	(19.4)	91.1	***87.2***	178.4	***(61.1)***	117.2	6.0	123.2
45	- Maintenance	377.6	33.1	410.7	(32.1)	198.8	***179.8***	378.6	***(168.0)***	210.6	10.0	220.6
46	Work Management	27.4	***6.5***	33.8	***(5.0)***	16.3	***12.6***	28.9	***3.8***	32.7	***(13.7)***	18.9
47	Site and Support Services	94.0	(7.0)	87.0	(7.7)	37.0	***42.4***	79.4	***(37.2)***	42.2	1.7	43.8
48	Tritium Removal Facility	14.2	(0.8)	13.4	0.5	14.5	(0.6)	13.8	0.6	14.4	0.4	14.8
49	**Total Nuclear Stations**	663.4	***79.4***	742.7	(63.7)	357.7	***321.3***	679.0	***(261.9)***	417.1	4.4	421.4
	Operations and Project Support											
50	Enterprise Engineering	187.9	***51.6***	239.4	(21.6)	112.1	***105.7***	217.8	***(53.9)***	164.0	0.8	164.8
51	Integrated Fleet Management	130.2	***73.1***	203.3	(3.0)	82.0	***118.2***	200.3	***(34.5)***	165.8	3.7	169.5
52	Environment, Health & Safety	12.9	(1.0)	11.8	***2.4***	8.0	***6.3***	14.3	(0.2)	14.0	0.3	14.3
53	Enterprise Projects	11.3	***1.9***	13.2	***(3.7)***	9.9	(0.5)	9.5	***(3.1)***	6.4	0.5	6.9
54	Other Support	69.2	***13.7***	82.9	(3.3)	48.4	***31.2***	79.6	***(10.1)***	69.5	0.8	70.3
55	Low and Intermediate Level Waste	4.8	***4.4***	9.2	0.5	3.5	***6.2***	9.7	***(6.1)***	3.6	(0.2)	3.4
56	**Total Operations and Project Support**	416.2	***143.6***	559.8	(28.6)	264.0	***267.2***	531.2	***(107.9)***	423.3	5.9	429.2
	CRVA Eligible Costs											
57	Fuel Channel Life Extension Project	0.4	0.0	0.4	(0.4)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
58	Pickering Extended Operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
59	Optimization of Pickering Shutdown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60	**Total CRVA Eligible Costs**	0.4	0.0	0.4	(0.4)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	**Total Base OM&A Before Adjustments**	1,080.0	***223.0***	1,303.0	(92.8)	621.7	***588.5***	1,210.2	***(369.8)***	840.4	10.3	850.7
62	**OEB/Settlement Adjustments[3]**	(32.4)	***32.4***		0.0	(18.6)	***18.6***		0.0		0.0	
63	**Total Base OM&A Including Adjustments**	1,047.6	***255.4***	1,303.0	(92.8)	603.0	***607.2***	1,210.2	***(369.8)***	840.4	10.3	850.7

Line No.	Business Unit	2028 Plan	(c)-(a) Change	2029 Plan	(e)-(c) Change	2030 Plan	(g)-(e) Change	2031 Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
	Nuclear Stations							
64	Operations & Maintenance	343.9	22.3	366.1	4.2	370.3	***183.4***	553.7
65	- Operations	123.2	***12.8***	136.0	2.7	138.7	***57.0***	195.7
66	- Maintenance	220.6	9.5	230.1	1.5	231.6	***126.3***	358.0
67	Work Management	18.9	***6.2***	25.2	***(2.7)***	22.5	***7.7***	30.2
68	Site and Support Services	43.8	3.8	47.6	***5.9***	53.5	***49.4***	102.9
69	Tritium Removal Facility	14.8	0.9	15.7	0.2	15.8	0.7	16.5
70	**Total Nuclear Stations**	421.4	33.1	454.5	7.5	462.1	***241.2***	703.3
	Operations and Project Support							
71	Enterprise Engineering	164.8	9.1	173.9	3.2	177.0	***40.6***	217.6
72	Integrated Fleet Management	169.5	6.6	176.1	7.1	183.1	***22.1***	205.2
73	Environment, Health & Safety	14.3	(0.6)	13.7	0.9	14.6	1.0	15.6
74	Enterprise Projects	6.9	(0.4)	6.5	(0.1)	6.4	0.6	7.0
75	Other Support	70.3	0.9	71.2	(0.3)	70.9	1.8	72.7
76	Low and Intermediate Level Waste	3.4	(0.8)	2.6	0.1	2.7	***1.4***	4.1
77	**Total Operations and Project Support**	429.2	14.7	443.9	10.8	454.7	***67.4***	522.2
	CRVA Eligible Costs							
78	Fuel Channel Life Extension Project	0.0	0.0	0.0	0.0	0.0	0.0	0.0
79	Pickering Extended Operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	Optimization of Pickering Shutdown	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	**Total CRVA Eligible Costs**	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82	**Total Base OM&A**	850.7	47.8	898.4	18.4	916.8	***308.6***	1,225.4

Notes:

1 Bold italic font indicates variance of 10% or greater.

2 All 2020-2026 amounts (within the Actual, Budget, and OEB Approved columns) have been restated for Nuclear organizational changes and transfers from Corporate Support (See Ex. A1-4-1, Att.2 and Ex. F2-2-1, Att. 1).

3 Per EB-2020-0290 OEB Decision and Order, Schedule A, p. 25, nuclear base OM&A costs are reduced by 3% per year over the 2022-2026 period.

Numbers may not add due to rounding.

Table 1c

Comparison of Darlington New Nuclear Program (DNNP) Facilities Base OM&A by Function ($M)[1]

Line No.	Business Unit	2026 Budget	(c)-(a) Change	2027 Plan	(e)-(c) Change	2028 Plan	(g)-(e) Change	2029 Plan	(i)-(g) Change	2030 Plan	(k)-(i) Change	2031 Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	Nuclear Stations											
1	Operations & Maintenance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	***6.0***	6.0	***29.6***	35.6
2	- Operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	***3.3***	3.3	***18.8***	22.0
3	- Maintenance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	***2.7***	2.7	***10.8***	13.6
4	Work Management	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	***2.6***	3.0
5	Site and Support Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	***11.8***	11.8	***15.7***	27.5
6	Tritium Removal Facility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	**Total Nuclear Stations**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	***18.2***	18.2	***47.8***	66.1
	Operations and Project Support											
8	Enterprise Engineering	0.4	0.0	0.5	0.1	0.5	0.0	0.6	***4.4***	5.0	***11.6***	16.6
9	Integrated Fleet Management	0.1	0.0	0.1	0.0	0.1	0.0	0.2	***4.5***	4.7	***20.5***	25.2
10	Environment, Health & Safety	0.5	0.2	0.7	0.2	0.8	0.1	0.9	0.1	1.0	(0.1)	0.9
11	Enterprise Projects	1.3	(0.2)	1.1	0.2	1.3	0.2	1.5	0.2	1.6	(0.3)	1.4
12	Other Support	1.6	0.4	2.0	0.3	2.2	0.0	2.3	***1.5***	3.8	***5.0***	8.8
13	Low and Intermediate Level Waste	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	**Total Operations and Project Support**	3.9	0.5	4.3	0.7	5.0	0.3	5.3	***10.8***	16.1	***36.7***	52.9
	CRVA Eligible Costs											
15	Fuel Channel Life Extension Project	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	Pickering Extended Operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	Optimization of Pickering Shutdown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	**Total CRVA Eligible Costs**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	**Total Base OM&A Before Adjustments**	3.9	0.5	4.3	0.7	5.0	0.3	5.3	***29.0***	34.4	***84.6***	119.0
20	**OEB/Settlement Adjustments**		0.0		0.0		0.0		0.0		0.0	
21	**Total Base OM&A Including Adjustments**	3.9	0.5	4.3	0.7	5.0	0.3	5.3	***29.0***	34.4	***84.6***	119.0
22	**DNNP Operational Readiness**	28.8	***17.1***	45.9	0.4	46.3	***(6.4)***	40.0	0.3	40.2	***(40.2)***	0.0

Notes:

1 Bold italic font indicates variance of 10% or greater.