CME Interrogatory #13

Interrogatory

Reference:
Exhibit A2, Tab 2, Schedule 1, Attachment 1

OPG stated that "Through implementation of operational efficiencies to enable achievement of the business plan targets, OPG will, to a significant extent, mitigate the need to reallocate operations and corporate support costs currently tied to Pickering to the remaining operations."

(a) To the extent that it is not already set out in the application, please define the operational efficiencies that will mitigate the need to reallocate operations and corporate support costs currently tied to Pickering to the remaining operations;
(b) For each efficiency, please break out each initiative or project that OPG is, or is planning to undertake, and describe each one;
(c) Please provide the estimated savings for each initiative;
(d) Please provide any costs of the initiative.

Response

a) – d)

As identified at Ex. A2-2-1, p. 20, OPG expects that the following initiatives over the IR Term will contribute to operating cost improvements: [1]

- Digital Strategy
- Resource Optimization
- Real Estate and Workplace Transformation
- Project Management

Over the IR Term, OPG expects to progress the listed initiatives, and to continue identifying, planning and developing further opportunities and strategies to meet the Base OM&A targets in the 2020-2026 Business Plan.

[1] In addition, in early 2021, the actions underlying "Right Work, Right Time, Right Value" have evolved to focus on Enterprise Operations. These actions are now part of an initiative called "Equipment Reliability" within the overarching Enterprise Operations' priority, "Our Plant." This initiative focusses on improving equipment reliability. A full description of each key improvement action is provided at Ex. F2-1-1, pp. 21-23 and a summary of the expected benefits of each action is provided at Ex. L-F2-01-SEC-119.

This response describes the key actions (and associated impacts) that are either underway or have been completed under these initiatives. The listed initiatives are either underway or have been completed, as described below. The list also includes initiatives that OPG has completed or is conducting during the current 2017-2021 IR term.

The actions conducted under these initiatives and under other initiatives that OPG may identify and develop over the IR Term will help the company achieve the Base OM&A targets established in the 2020-2026 Business Plan. As described in Ex. A2-2-1, the Base OM&A targets in the 2020-2026 Business Plan were developed using a top-down approach, based on a framework of strategic objectives, resource guidelines, and costing assumptions. Accordingly, there is no list of initiatives or planned actions that sums to the total cost reductions targets that OPG has targeted for the IR Term.

Digital Strategy

As described in Ex. A2-2-1, p. 20, the Digital Strategy initiative leverages technology solutions to achieve the Base OM&A targets set out in the 2020-2026 Business Plan. Actions under the Digital Strategy include the use of various technologies (e.g., process automation, artificial intelligence, and use of drones) to re-design and streamline internal processes and how various functions within OPG are delivered.

In many cases, there are varied and overlapping benefits from Digital Strategy actions. For example, investments in artificial intelligence are helping OPG achieve benefits in corporate support and operations costs. Accordingly, the benefits of specific actions can be difficult to quantify or attribute to specific actions.

Major historic and current actions under the Digital Strategy initiative are summarized below:

i. <u>Artificial Intelligence & Data Strategy</u>

OPG is investing in artificial intelligence ("AI") and data analytics tools that are beginning to provide efficiency and performance benefits across the company. These technologies serve as key enablers of benefits, allowing OPG to automate functions where automation was previously impossible and to make better decisions based on the extensive volumes of data created and gathered in the course of the company's operations.

Historically, OPG has used multiple systems to manage this "big data", each with its own reporting capabilities and data. In order to generate insights, reports and analysis, individuals have to pull data from different systems and build reports. This has been done either through manual processes, or through

specific enhancement IT projects. AI tools will enable OPG to make efficient use of this "big data", allowing it to convert this mass of information into useable forms, with more intelligent search capabilities and the ability to drill further into detailed information. (One tool that OPG is using to accomplish this is "PowerBI" which is discussed in the Re-Imagine section below.)

OPG expects that AI and data analytics will reduce costs and lead to efficiencies through automation, more informed decision making, and more effective knowledge transfer. OPG expects to realize benefits from these in both generating operations (e.g., the Monitoring & Diagnostics Centre, discussed below) and in the company's corporate support functions (e.g., the Re-Imagine programs, discussed further below).

ii. Monitoring & Diagnostics Centre

OPG is installing sensors and remote monitoring technologies on both hydroelectric and nuclear plant equipment, which will provide real time data and analysis to ensure maintenance is done promptly and resource utilization is maximized. The implementation of the Monitoring & Diagnostics Centre will allow for the application of Advanced Pattern Recognition Technology and Continuous On-Line Monitoring sensor technology with diagnostic and prognostic analytics and advanced equipment health visualization. This will allow for early detection of equipment degradation or anomalies, and allow OPG to initiate repairs that will prevent catastrophic or consequential failures, avoid safety and environmental events, reduce costly time-based project management tasks and optimize maintenance planning. These new technologies will also provide workforce optimization by enabling skilled workforce with more remote analytical capabilities to provide fleet-wide diagnostics. Benefits of this improvement action include avoided costs associated with early detection of equipment failures, improvement in plant heat rate and reduced thermal performance losses. The Monitoring and Diagnostics Centre is further discussed in L-F2-01-SEC-119 and L-A2-02-SEC-14.

iii. Re-Imagine

Re-Imagine was a project that focused on using technology to enable efficiencies within existing processes by deploying robotic process automation, implementing financial and operational dashboard reporting, and optimizing existing tools. With the completion of the project in 2020, OPG is recognizing optimization and productivity enhancements and savings across support services organizations. The project achieved the following:

- MyBusiness data was launched through PowerBI dashboards and reports, allowing the business to focus on making better-informed decisions based on current data. Automated forms were developed to streamline business processes and gain efficiencies within the business planning cycle. These productivity enhancements reduced manual effort, increased analytical capabilities and enabled savings within the Finance organization.

- Re-Imagine also facilitated the launch of the MyRequest portal, which enabled self-serve capabilities for the entire organization, and provided a framework for future self-serve opportunities. Digitization of a number of Human Resources forms, along with implementation of workflow capabilities, reduced manual effort and streamlined the service delivery model within the Shared Services organization, enabling savings.

- The enablement of additional Ariba functionalities and modules enforced standardization of processes with appropriate controls, as well as implemented or enhanced interfaces between the various systems within the Supply Chain organization. This streamlining of processes reduced the need for manual reconciliation activities performed by staff, enabling savings.

- Foundational work was also completed for the implementation of improved financial and supply chain systems, including business planning and consolidation, contract management and guided buying modules.

iv. <u>Re-Imagine 2.0</u>

Re-Imagine 2.0 is a new program that leverages the success from Re-Imagine 1.0 and encompasses additional processes and solutions across OPG, specifically in areas of Human Resources, Supply Chain and Finance.
The program is expected to:

- Improve and simplify business processes and accountabilities, including re-design of certain Human Resources programs such as the recruitment and change management cycles.

- Implement a single portal, providing easy and direct access to the support needed in the shared services functional areas, building upon the MyRequest tool launch under Re-Imagine.

- Provide further information and analysis in support of business needs and objectives, through better interface between systems and the relevant planning and forecasting tools.

Re-Imagine 2.0 is expected to enable efficiencies and productivity that contribute to performance improvements across OPG, including reduced manual processes, timelier resolution of issues and reduced follow-up. This project will enable OPG to achieve and maintain support services expenditures, consistent with the forecast levels in this application. Detailed scope requirements for this project are being developed.

v. Drones

OPG's increasing use of drones is transforming how the company performs inspections, analyzes information and documents findings. As summarized below, the expected benefits of this include reduced operating costs due to lower resource requirements, improved performance outcomes and, in the case of nuclear facilities, increased safety due to lower radiation exposure for OPG personnel and contractors:

- Reduced OM&A: Drone-based inspections require fewer resources, reducing the cost of performing this critical function. Historically, inspections would require individuals to go into the area of inspection, with support groups having prepared the area for access and subsequently clean the area after inspection. These activities require additional labour and resources such as scaffolding, tools and coordination of tasks. However, where drone inspection can meet the requirements for inspection, it reduces the demand on these resources which leads to cost savings and better utilization of those resources. OPG has begun testing these applications of drone technology such as pressure relief duct inspections, and is seeing tangible benefits.

- Enhanced Performance Outcomes: The advanced capabilities of drones and high-quality video rendering is also expected to improve the analysis, inspection footage and potentially automate areas of inspection with improved visual readers and analyzers.

- Improved Safety through Reduced Radiation Exposure: Using drones to perform tasks historically conducted by individuals can reduce or eliminate radiation exposure instances for OPG employees and contractors.

vi. Human Resources Services and Processes

Using Lean methodology, OPG plans to identify, review, and revise processes within the company's HR functions to realize cost reductions and increase efficiency. The scope of these reviews vary in size from small, department-specific processes to Enterprise-wide actions, including:

- Implement a self-service portal for OPG employees, through which they can access information, seek assistance and access various support on a self-service basis. Automating these functions will allow OPG to find operating cost efficiencies.

- Leverage emergent technologies to simplify the enterprise training content creation process and expand information resources at reduced cost.

- Improve the vendor onboarding process to find efficiencies which minimize Vendor wait-times, automate key forms within the process, and explore opportunities to apply digital workflows to the process.

- Revise, simplify, and integrate the long term disability, attendance support, disability management, and total attendance management programs, and find additional opportunities to leverage Vendors.

- Revise and standardize the organization change process and reference material to enable faster processing of changes

Beyond these specific Digital Strategy actions, OPG is continuously seeking opportunities to generate efficiencies by implementing technology to eliminate repetitive tasks and allow skilled resources to spend more time on higher value work.

Resource Optimization

OPG has achieved significant efficiencies in work program resources, and will continue to optimize over the IR Term. The largest identified drivers of savings through resource optimization are the use of Term and Extended Temporary employees ("ETE"), and the significant management

i. People Powering the Future

As discussed in Ex. F4-3-1, the planned shutdown of Pickering will result in a transformational change to OPG's workforce, with an expected reduction of over

3,000 employees. People Powering the Future focusses on ensuring work programs are resourced appropriately in accordance with the 2020-2026 Business Plan while seeking to minimize the organizational and financial impacts associated with the transition to post-Pickering operations.

In preparing for this transition, OPG is developing strategies to ensure there is proper knowledge retention and transfer in order to minimize any impact to work programs and operations. These changes are also expected to support a leaner organization post planned Pickering shutdown, in line with the business plan cost targets. As the organization makes these changes, it is important to ensure that the right individuals and skills are available, within the provisions of collective agreements. OPG is also ensuring that workforce strategies are designed to manage the financial cost of the downsizing process.

Key improvement actions and anticipated results include:

- Implement the changes required to support the targeted organization for OPG post-Pickering shutdown, including streamlining and reducing demand for engineering support as already demonstrated thorough the organizational realignment and the centralization of the engineering function.
- Continue to leverage headcount reductions through attrition, where possible, retain vacancy controls and implement targeted staffing plans.
- Optimize the resource mix and utilization of staff to support an effective transition to a post-Pickering organization while ensuring safe and reliable operations, including for post-shutdown activities at Pickering.

ii. <u>Use of Terms and Extended Temporary Employees</u>

As identified in Ex. F4-03-01, lines 21-25, OPG was able to establish the Term and ETE employee classifications in support of mitigating the organizational and cost impacts of the planned reductions in the workforce as a result of the Pickering shutdown. The ETE classification was awarded as part of the 2020-2021 collective agreement; however OPG has had the term classification longer, and as noted in Ex. F4-03-01, lines 8-9, as of July 2020 approximately 700 Terms had been hired since inception of the classification. OPG will continue to hire into these classifications to optimize resourcing. The estimated savings associated with the use of the Term and ETE classifications for the 2022-2026 period is identified in Ex. L-F4-03-01-Staff 276 (LR confidential).

iii. 2020 Organizational Realignment

As described in Ex. A2-2-1, p. 6, the organizational realignment that OPG undertook in the second half of 2020 moved the company toward an optimized post-Pickering organizational structure, reducing management roles across the company by more than 10%. As described in Ex. L-A1-01-AMPCO-001, the organizational realignment involved an overall redesign and consolidation of a number of operations and other groups, such as engineering and major project execution, to facilitate increased cross-functional collaboration, efficiencies, enterprise talent development and overall progress towards the company's post-Pickering targets. This will allow OPG to more efficiently and effectively achieve OPG's business plan objectives, meet business challenges and progress enterprise decision-making processes.

The savings from this realignment are reflected in the 2020-2026 Business Plan. Details on the OM&A savings resulting from the 2020 Realignment are provided in Ex. L-A2-02-CCC-012.

Real Estate and Workplace Transformation

As described in Ex. D3-1-1, p. 7, OPG's Real Estate strategy is to reduce its overall real estate footprint by optimizing the layout of its offices through workplace transformation and by investing in a new, sustainable corporate campus to consolidate non-plant employees at a principal location in Clarington, Ontario.

i. Workplace Transformation projects

As described in Ex. D3-1-1, pp. 8-9, Workplace Transformation projects are focussed on optimizing OPG's real estate assets and reducing OPG's overall real estate footprint, shifting to a more agile and adaptable workplace by leveraging technology and allowing staff to work efficiently from any location, creating a more collaborative work environment, and minimizing OPG's real estate costs. These projects include: 700 University Workplace Transformation (completed in 2019), the Clarington Corporate Campus Head Office and other attendant projects such as for the Darlington Energy Complex.

Key accomplishments of the workplace transformation at 700 University Avenue, completed in 2019, included:

- Reduction of leasing footprint by approximately 166,000 square feet, resulting in annual savings of approximately $9.8M (in present value) in leases, utilities and related costs (Ex. L-D3-01-SEC-110 c)).
- Standardized workstation sizes and the implementation of free address – as defined in Ex. D3, Tab 1, Schedule 1, p. 7, line 19 – eliminated the

need for formal move requests, reducing efforts around coordination of personnel moves and any related reconfigurations.

A number of the other projects are in the planning phase and are expected to help OPG to reduce overall real estate footprint.

As a component of workplace transformation, steps continue to be taken to reduce and consolidate the real estate footprint, with certain leases not renewed during the planning period. Ex. L-D3-01-Energy Probe-046 part (a) provides 2020 occupancy costs for each leased building OPG intends to exit.

ii. Clarington Corporate Campus

The Workplace Transformation projects identified above contribute to OPG's strategy of reducing square footage per employee, moving away from leasing and creating a central location to accommodate all non-plant staff in the Clarington Corporate Campus. Accommodating such staff in this new building, compared to OPG continuing to lease certain premises, is projected to result in reductions of approximately $65M, in present value terms, over the next 40 years. Further details on the Clarington Corporate Campus and expected savings are provided in Ex. L-D3-01-Staff-176, part (d).

Project Management

OPG continuously seeks to improve the performance of its project management function. Ex. L-D2-01-SEC-050 addresses nuclear capital project management over the IR Term.

OPG identified five project management initiatives for the 2017-2021 IR Term in EB-2016-0152 Ex. D2-1-1, all of which are complete. The status of these initiatives is provided at Ex. L-D2-01-AMPCO-023.