# COST ALLOCATION METHODOLOGY

## 1.0 PURPOSE

The purpose of this evidence is to describe OPG's cost allocation methodology.

## 2.0 OVERVIEW

OPG's cost allocation methodology is overall consistent with that which was accepted by the OEB in EB-2016-0152, EB-2013-0321, EB-2010-0008 and EB-2007-0905. The cost allocation methodology distributes OPG's central and common costs across its operations and to its subsidiary businesses. This includes the costs of corporate Support Services (Ex. F3-1-1) and Operations and Project Support groups (Ex. F2-2-1) as well as centrally-held costs (Ex. F4-4-1).

OPG retained Elenchus Research Associates ("Elenchus") to confirm the consistency of its cost allocation methodology with the methodology reflected in the payment amounts set by the OEB in EB-2016-0152, including certain updates and refinements subsequently made to the methodology. The Elenchus report is provided in Attachment 1 ("Elenchus Report").

The updates and refinements made to the cost allocation methodology are identified in section 4.1 of the Elenchus Report. In summary, the changes were made to reflect changes in OPG's business such as the addition of new unregulated subsidiaries, make better use of available data, enhance the internal consistency of the methodology and to improve the efficiency of the cost allocation process. Elenchus has concluded that it "finds the updates and refinements made to the cost allocation since EB-2016-0152 to be reasonable and appropriate."[1]

The revisions made to the methodology do not have a material impact on the results of the cost allocations.

[1] Elenchus Report, p. 25.

As discussed in Ex. A2-2-1 and elsewhere in this application, in September 2020, OPG underwent an organizational realignment, which combined previously separate Nuclear and Renewable Generation ("RG") business units under a single Enterprise Operations organization, and centralized a number of operations and project support groups, among others. Elenchus reviewed the impacts of the revised organizational structure on the cost allocation methodology and was satisfied that "where necessary, the cost allocation methodology has been appropriately modified to reflect the 2020 Organizational Realignment."[2] Elenchus' discussion and review of the specific organizational changes can be found in section 4.2 of the Elenchus Report.

The details of the cost allocation methodology, by function, can be found in Appendix A of the Elenchus Report.

Elenchus also considered the methodology used by OPG to derive the asset service fees charged for the use of certain assets held centrally to both the regulated and unregulated business units. Asset service fees that attribute costs to the regulated facilities are discussed in Ex. F3-2-1. In addition, Elenchus' specifically reviewed the asset service fee used to attribute the costs to Laurentis Energy Partners ("Laurentis"),[3] an unregulated subsidiary, for use of some of the Darlington Nuclear assets in relation to producing Molybdenum-99 isotopes. This asset service fee is discussed in Section 4 below.

## 3.0 METHODS OF ALLOCATION

The cost allocation methodology uses two methods to distribute costs among the business units: direct assignment and allocation.

### 3.1 Direct Assignment

Direct assignment is used when specific resources, both individual employees and specific cost items, used by a particular business unit can be reasonably established. Direct assignment comprises specific identification and management estimation of resources.

[2] Ibid.
[3] Laurentis Energy Partners was previously known as Canadian Nuclear Partners.

There is specific identification of resources where there is a direct relationship between the costs incurred by a support group and the business that causes the costs to be incurred. Estimation of the resources used by the business may be based on current time estimates or historical activity.

### 3.2 Allocation

Allocations are used when more than one business unit uses a resource but the portions of the resource that each uses cannot be directly established. In these cases, a cost driver is used to allocate the costs of the resource. A cost driver is a formula for sharing the cost of a resource among those who caused the cost to be incurred. As discussed in the Elenchus Report, OPG's methodology uses external drivers, having eliminated the use of internal drivers for corporate Support Services costs (see section 4.1.5 of Elenchus Report). External drivers are based on data that are external to the allocation process. For example, computer hardware costs incurred by the IT group are allocated to business units based on the number of IT end users (also referred to as LAN IDs).

Internal drivers are based on values computed as part of the cost allocation process. For example, a supervisor's salary may be allocated in proportion to the salaries of the individuals being supervised. The use of internal cost drivers requires an iterative calculation process due to computational inter-dependencies, which introduces significant complexities and time to the cost allocation model. As part of an effort to simplify the administration of the cost allocation process, OPG has replaced internal allocators previously used in the methodology with appropriate external cost drivers.

### 3.3 Application of Methodology

OPG continues to use three steps when allocating a department's costs:

- Step One – Specific Identification of Resources
  - The costs of resources specifically identified to a business are assigned to it.
  - Labour costs associated with individuals who support only one business are assigned to it.
  - Non-labour costs directly caused by one business are assigned to it.

- Step Two – Estimation of Resources

The next step is to identify the resources in each department that directly support more than one business and to estimate the resources attributable to each business unit. The costs of these resources are directly assigned to each business unit in proportion to the estimated time required by that business unit.

- Step Three – Assign Cost Drivers

OPG uses the appropriate standardized cost drivers for all remaining activities or expenses.

## 4.0 AFFILIATE RELATIONSHIPS

The cost allocation methodology attributes applicable central and common costs to the company's operations carried out through wholly-owned subsidiaries, including Atura Power, Eagle Creek Renewable Energy ("Eagle Creek") and Laurentis, as well as energy trading and other unregulated non-generation activities. With respect to the subsidiaries, as discussed in section 4.1.2 of the Elenchus Report, this is accomplished in two ways:

- General allocation of OPG's corporate oversight and ownership costs as the parent entity, and
- Charges for central and common costs applicable to specific resources that may be transacted by subsidiaries from time to time, on a cost basis, with the parent.

Laurentis is pursuing investment in new technologies for the purpose of producing Molybdenum-99 during the IR term which will make use of the reactors at Darlington. In addition to the above cost allocation process, an asset service fee is in place to charge costs for the use of the Darlington reactors to Laurentis.

The fee charged by OPG to Laurentis is computed in a cost-based manner. In line with the general methodology for the asset service fees discussed in Ex. F3-3-1, the Molybdenum-99 asset service fee is based on depreciation expense and tax-adjusted return on capital amounts for the applicable Darlington reactors used in the production of Molybdenum-99. The return on capital amounts are computed using after-tax rates of

return which are generally consistent with the proposed weighted average cost of capital rates for the regulated operations as per Ex. C. The tax-adjusted rate of return is applied to the average budgeted net book value of the Darlington unit assets to be used in the production of Molybdenum-99 (plus an allocation of common station assets to the unit) for the year, and then apportioned using the ratio the of the net book value of the Laurentis assets used to harvest Molybdenum-99 to the above net book value of the Darlington units used in the production of Molybdenum-99.

The result is an offset to OPG's nuclear OM&A expense of $2.3M (2022), $2.2M (2023), $2.0M (2024), $3.5M (2025) and $3.2M (2026), included in Ex. F2-1-1, Table 1. As outlined in Section 4.3.1 of their report, Elenchus has found the Molybdenum-99 asset service fee methodology to be reasonable and aligned with sound cost allocation principles.

The production of Molybdenum-99 at the first Darlington unit is currently expected to commence in 2022.

Investments made at Darlington related to the production of Molybdenum-99 are not included within the nuclear rate base and the associated operating costs are excluded from the nuclear revenue requirements.

## ATTACHMENTS

Attachment 1: Cost Allocation Review Ontario Power Generation by Elenchus Research Associates.