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ALLOCATION OF 1 SUPPORT SERVICES COSTS 2 3 4 1.0 **PURPOSE** 5 The purpose of this evidence is to describe the Support Services costs assigned and 6 allocated to the nuclear business as well as the underpinning cost allocation 7 methodology. 8 9 2.0 **OVERVIEW** 10 Support services costs assigned and allocated to the nuclear business unit are \$448.9M, 11 \$437.2M, \$442.7M, \$445.0M, and \$454.1M for the test period 2017 to 2021, as 12 presented in Ex. F3-1-1 Table 3. 13 14 Support Services include Business and Administrative Services, Finance, People and 15 Culture, Commercial Operations and Environment, and Corporate Centre. As centre-led 16 organizations in OPG, Support Services provide support to the nuclear business. A 17 description of Support Services is provided in section 3. 18 19 Support Services costs are either directly assigned or allocated to the regulated 20 businesses. OPG directly assigns costs that are directly related to a business unit. For 21 example, Support Services employees working at, and solely in support of, a business 22 unit would be directly assigned to that business unit. Support Services costs that are 23 associated with services utilized by more than one business unit are allocated based on 24 appropriate cost drivers, which reflect cost causation or benefits received by the 25 business unit. The methods of cost allocation are provided in section 5. 26 27 OPG's cost allocation methodology is the same as the methodology that was approved 28 by the OEB in EB-2013-0321, EB-2010-0008 and EB-2007-0905. The methodology was 29 reviewed in EB-2013-0321 (Ex. F5-5-1) by independent cost allocation expert HSG 30 Group Inc. ("HSG"). HSG concluded that the methodology to assign and allocate costs

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1 met best practices and was consistent with cost allocation precedents established by the

OEB, and that the allocated costs met the requirements of the OEB's "3-prong test".

3

2

3.0 SUPPORT SERVICES COSTS - TOTAL OM&A

5 Exhibit F3-1-1 Table 1 summarizes the total OPG Support Services costs over the 2013

6 to 2021 period. Support Services costs are relatively stable during the test period.

7

8 Support Services costs decrease over the 2013 to 2015 period that coincides with the

9 implementation of a centre-led organization driven by the Business Transformation

initiative. Support Services groups leveraged attrition by not replacing staff that retired,

took advantage of economies of scale by consolidating staff that perform similar work,

12 and streamlined processes.

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In 2011, OPG commenced the Business Transformation initiative to improve its cost

15 structure and to design a more efficient and effective organization. This initiative led to

the creation of a centre-led organizational structure, reduced the number of OPG

employees and introduced changes to eliminate work, improve processes and achieve

18 efficiencies. The Business Transformation initiative is described further at Ex. A4-1-1 of

19 OPG's evidence in EB-2013-0321. While Business Transformation has ended as a

discrete initiative, efforts to continually improve and manage OPG's resources are

embedded in day-to-day operations and business planning processes.

2122

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20

23 Only through continuous improvement and increased productivity will OPG be able to

achieve the challenging targets set out in its Business Plan. For example, the Business

25 Plan includes the initiatives for Business and Administrative Services ("BAS") to drive

26 continuous improvement (see OPG's 2016-2018 Business Plan and three-year financial

projection at Ex. A2-2-1 Attachment 1, Appendix 8 for further details).

28

29 In computing the nuclear payment amounts, OPG has applied a 0.3 per cent stretch

30 factor to the revenue requirement resulting from the company's nuclear Base OM&A and

31 Support Services costs allocated to the nuclear business (see Ex. A1-3-2). OPG's

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- stretch factor proposal provides a meaningful performance incentive during the term of this Application. The proposed stretch reductions are in addition to efficiencies and
- 3 performance improvements within the company's business planning processes.

4

- 5 Exhibit F3-1-1 Table 3 presents the Support Services costs assigned and allocated to
- 6 nuclear over the historical, bridge, and test years. Performance initiatives incorporated
- 7 into the business planning process and the corresponding performance and operational
- 8 efficiency improvements are reflected in the forecast expenditures in this Application.
- 9 The Support Services costs shown in this Exhibit do not reflect application of the stretch
- factor, which is shown separately in Ex. A1-3-2.

1112

3.1 Business and Administrative Services

- 13 BAS manages the following functions: Information Technology, Real Estate, and Supply
- 14 Chain. The BAS functions have not changed since EB-2013-0321.

1516

- Information Technology ("IT")
- 17 The IT group oversees OPG's information management and information technology
- 18 needs. IT is accountable for the strategic planning, management and operations of all
- 19 business and technical information systems, but does not support process computers
- 20 that control plant systems and operations. IT also administers OPG's information
- 21 management and governing documents framework.

22

- 23 Information technology services are provided through a combination of internal staff and
- 24 an outsource service contract with New Horizon System Solutions ("NHSS"), owned by
- 25 Capgemini. NHSS delivers application and infrastructure management services across
- 26 OPG. OPG IT provides application management services to Commercial Operations due
- to the commercially sensitive nature of the applications, as well as specific infrastructure
- and application management services to staff at the hydroelectric sites.

- 30 Exhibit F3-1-1 Table 7 presents BAS costs that are assigned and allocated to nuclear
- 31 over the historical, bridge, and test years. The costs related to NHSS services, which

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- 1 include Infrastructure Management, Application Maintenance, Data Centre Services, and
- 2 Other Services, are explained in more detail below.

3

Infrastructure Management costs refer to volume-based costs for NHSS services such as network management for both data and voice, end-user services such as service desk management and desktop support, IT security, disaster recovery and business continuity planning.

8

Application Maintenance costs cover NHSS services for providing day-to-day support for OPG's business applications including: application maintenance and support, applications operations and monitoring, application upgrades, database and middleware support. IT also works closely with application owners to plan for patches and technical upgrades, life cycle planning, release management, testing and commissioning and overall demand management.

1516

17

Data Centre Service costs are NHSS services related to the management of the mainframe and servers, storage and backup system, capacity planning and performance tuning, system operations and monitoring and IT facilities.

1819

The Other Services, referred to in the tables, include NHSS fixed costs for services such as Account Management (contract governance), Service Management (incident, problem, asset and configuration management as well as operational and service level reporting), Commercial Operations Systems operations, monitoring and support.

24

The IT Support Costs identified in the tables refer to the cost of the internal IT support groups providing IT Service and Project Portfolio management, IT Enterprise Strategy and Architecture and IT Programming and Performance Management.

- 29 Real Estate
- 30 The Real Estate group provides centralized support services through three departments:
- 31 Real Estate Services, Facilities and Projects, and Business Infrastructure Services.

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1 2

Real Estate Services

- 3 On a corporate-wide basis, Real Estate Services acquires, manages and disposes of
- 4 real estate rights and interests; manages all commercial leases; consults on municipal
- 5 planning issues; maintains real estate and property documents; develops and
- 6 implements accommodation strategies to meet space requirements outside the
- 7 generating stations; and, provides property tax services for all property owned by OPG.

8 9

Facility and Projects

- 10 Facility and Projects provides property management services, space planning, furniture
- and facility project management; and company-wide fleet administration. In addition,
- 12 emergency response services are provided for all facilities under its control, along with
- 13 generating station support as requested.

1415

Business Infrastructure Services

- 16 Business Infrastructure Services provides a suite of administrative services to OPG
- 17 clients including: records management and storage; document processing; graphics and
- printing services; mail and courier service, audio/visual; office equipment and supplies;
- 19 library services; Real Estate Services call centre; and administrative support for staff
- 20 located at OPG Head Office, Pickering, and Darlington, as well as other nuclear groups
- 21 located at certain facilities in Durham Region.

22

- 23 Real Estate OM&A consists of costs to support these services, as well as costs of
- 24 managing common real estate assets. The generation businesses are charged an asset
- 25 service fee related to the use of these common assets (Ex. F3-2-1).

26

- 27 Exhibit F3-1-1 Tables 7 summarizes Real Estate costs assigned and allocated to nuclear
- over the historical, bridge, and test years.

29

30

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1 Supply Chain

- 2 The Supply Chain group is responsible for procuring services and materials and
- 3 managing contracts for OPG. Supply Chain focuses on maintaining integrity in the
- 4 procurement process, delivering value for money and protecting OPG's assets. In
- 5 addition, Supply Chain performs market analysis and develops long-term sourcing
- 6 strategies for the supply of uranium.

7

- 8 Exhibit F3-1-1 Table 7 summarizes Supply Chain costs assigned and allocated to
- 9 nuclear over the historical, bridge, and test years.

1011

3.2 Finance

- 12 Finance provides strategic advice, services, and support in the areas of controllership,
- investment planning, treasury and fund management. On behalf of the company, it
- 14 prepares financial statements and maintains accounting policies and procedures in
- 15 accordance with U.S. Generally Accepted Accounting Principles.

16

17 Controllership

- 18 Controllership provides services directly to Nuclear, Hydroelectric, Thermal and Support
- 19 Services groups. Staff are directly assigned to the business units and are located at the
- 20 production sites they support. Controllership also provides shared financial services
- 21 (e.g., accounting, processing of billings, accounts payables, business expenses, etc.),
- business planning and reporting, and income and commodity tax services.

2324

Investment Planning

- 25 Investment Planning develops and evaluates major projects and strategic initiatives,
- 26 develops guidelines for and provides advice on business cases and lifecycle plans;
- 27 develops models combining engineering and financial aspects for evaluating business
- 28 decisions and for valuing capital investments; and designs and conducts risk
- 29 assessments.

30

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Treasury and Fund Management

- 2 The Treasury group is responsible for cash management, financial exposure
- 3 management and capital structure management. The Risk Management and Insurance
- 4 department is responsible for OPG's insurance program, claims processing and contract
- 5 reviews.

6

1

- 7 Fund Management has the responsibility for management and oversight of OPG's
- 8 Nuclear Used Fuel Fund, Nuclear Decommissioning Fund, and OPG's Pension Fund.
- 9 The investment management of these three funds has been outsourced to third party
- 10 investment managers. Management and oversight of the three funds includes
- 11 recommending the strategic asset mix of the funds, monitoring compliance with
- 12 legislation and agreements, selection of investment managers, carrying out due
- diligence audits, and providing monitoring and oversight of the fund activities.

14

- 15 CFO Office
- 16 The CFO Office manages the Finance Business Unit.

17

- 18 Exhibit F3-1-1 Table 5 summarizes Finance costs assigned and allocated to nuclear
- over the historical, bridge and test years.

20

21

3.3 People and Culture

- 22 People and Culture ("P&C") enables OPG and its leaders to build a productive, engaged
- workforce with the right people, that have the right skills, in the right roles to achieve
- 24 business results. The People and Culture function is responsible for labour relations,
- 25 health and safety standards, compensation and benefits, training, talent management
- 26 and succession planning. Its specific accountabilities by organization are described
- 27 below:

28

29 Senior Vice President

30 The Senior VP leads the People and Culture business unit.

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1 HR Business Partners

- 2 HR Business Partners provides strategic advice to the business and leads the
- 3 implementation of P&C programs within a given business unit.

4

5 <u>Total Rewards and Solutions Centre</u>

- 6 The Total Rewards and Solutions Centre develops and manages the compensation and
- 7 benefits program to achieve the company's business objectives and provides analytical
- 8 support related to work force planning and P&C program management. This group also
- 9 provides administrative support and services through the operation of an HR Service
- 10 Centre and transaction processing related to payroll.

1112

Health, Safety, Employee and Labour Relations

- 13 Health, Safety, Employee and Labour Relations develops and maintains a health and
- 14 safety management system and manages all labour relations activities to ensure
- compliance with collective agreements, labour legislation, and to ensure policies for non-
- represented staff are applied in a manner consistent with the intent of the policies.

17

18 Talent Management and Business Change

- 19 Talent Management and Business Change takes steps to attract, develop and retain
- 20 staff with the talents required to meet the company's needs and co-ordinates succession
- 21 planning to ensure that critical skills and business knowledge are maintained and to
- 22 ensure that corporate leadership requirements are met.

2324

Learning and Development

- 25 The Learning and Development group develops and delivers training for OPG
- 26 employees, ensuring all licensing and regulatory requirements are met and that OPG's
- workforce has the knowledge and skills required for safe and reliable operations.

28

- 29 Exhibit F3-1-1 Table 9 summarizes People and Culture costs allocated to nuclear over
- 30 the historical, bridge, and test years.

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3.4 Commercial Operations and Environment

- 2 Commercial Operations and Environment includes Commercial Contracts, Environment,
- 3 Regulatory Affairs, Electricity Sales and Trading, and Integrated Revenue Planning
- 4 sections.

5

1

- 6 OPG recently restructured Commercial Operations and Environment by transferring
- 7 Commercial Contracts, Environment, Regulatory Affairs, Electricity Sales and Trading
- 8 and Integrated Revenue Planning groups to different divisions within the organization.
- 9 Despite changes in organizational structure and reporting relationships, OPG continues
- 10 to present costs as if Commercial Operations and Environment remained intact.
- 11 Presenting costs in this way allows for ease of comparability between historical, bridge
- 12 and test years, provides continuity with previous filings and is consistent with the
- presentation in OPG's approved 2016-2018 Business Plan (Ex. A2-2-1 Attachment 1).
- 14 The changes in organizational structure do not have a material impact on the costs
- 15 forecast for the bridge year and test period and do not have an impact on the cost
- 16 allocation methodology.

17

18 Commercial Contracts

- 19 Commercial Contracts includes Fuels, Commercial Services, and Bruce Lease
- 20 Management departments. The Fuels department is responsible for the procurement
- and delivery of fuel (excluding uranium), sales of by-products, acquisition of emission
- 22 allowances and credits, negotiation and contract management for generation and
- 23 ancillary services with the Independent Electricity System Operator ("IESO").
- 24 Commercial Services markets and manages a program for the sale of isotopes and
- 25 heavy water products, and services for existing and future applications. Bruce Lease
- 26 Management Office manages contracts with Bruce Power.

2728

Environment

- 29 Environment provides operational support to OPG plants and facilities to minimize
- 30 environmental risks and impacts, reports on OPG's environmental performance,
- 31 provides environmental assessment and specialist support and seeks opportunities for

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- 1 environmental leadership. The Environment Division supports OPG in a wide range of
- 2 environmental subject areas, including aquatic and terrestrial biology, contaminated land
- 3 and groundwater, radiological environmental management, air and water emissions,
- 4 waste management, certificates of approval, spills management and legislative
- 5 monitoring.

6 7

Regulatory Affairs

- 8 Regulatory Affairs is responsible for OPG's interactions with economic regulators. These
- 9 include the OEB, IESO, the National Energy Board and other Canadian and U.S.
- 10 regulators that have an impact on OPG's operations. Regulatory Affairs provides
- regulatory intelligence, strategy, and advice and also manages regulatory interactions to
- obtain approvals and outcomes that allow OPG to accomplish its business goals.

1314

Electricity and Sales Trading

- 15 The Electricity Sales and Trading group co-ordinates the offering of OPG's generation
- into the IESO market to maximize OPG's net revenues by integrating and optimizing the
- 17 generation portfolio and trading activities. This includes outage planning and strategies
- 18 to optimize production based on market signals; managing generation risks; and
- 19 engaging in interconnected market electricity trading.

20

21

Integrated Revenue Planning

- 22 Integrated Revenue Planning provides power market forecasts of OPG unit production,
- 23 price, revenue, and gross profit margin for OPG units along with appropriate risk
- 24 measures. This group includes Market Affairs which monitors, provides advice and
- 25 analysis on potential changes to the market, responds to potential compliance and
- 26 surveillance issues and provides support for OEB rate submissions.

27

- 28 Exhibit F3-1-1 Table 3 summarizes Commercial Operations and Environment costs
- allocated to nuclear over the historical, bridge, and test years.

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3.5 Corporate Centre

- 2 The corporate centre includes: the Executive Office (Chairman, President and CEO
- 3 offices); Corporate Executive Operations; Law; Corporate Relations and
- 4 Communications; Corporate Business Development and Enterprise Risk Management;
- 5 and Assurance.

6

1

- 7 OPG recently restructured Corporate Centre by transferring Law, Corporate Relations
- 8 and Communications and Corporate Business Development and Enterprise Risk
- 9 Management groups to different divisions within the organization. Despite the changes in
- organizational structure and reporting relationships, OPG continues to present costs as if
- 11 Corporate Centre remained intact. Presenting costs in this way allows for ease of
- 12 comparability between historical, bridge and test years, provides continuity with previous
- 13 filings and is consistent with the presentation in OPG's approved 2016-2018 Business
- 14 Plan (Ex. A2-2-1 Attachment 1). The changes in organizational structure do not have a
- material impact on the costs forecast for the bridge year and test period and do not have
- an impact on the cost allocation methodology.

17

- 18 Executive Office
- 19 The Executive Office is responsible for the overall management and strategy of the
- 20 company.

21

- 22 <u>Corporate Executive Operations</u>
- 23 The Corporate Executive Operations function supports OPG's Board of Directors and
- 24 the Executive Office, and interfaces between the OPG Board, management and OPG's
- shareholder.

26

27 <u>Law</u>

- 28 Law provides legal advice and services to support all business units across OPG,
- 29 including support for various procurement activities and corporate and commercial
- 30 matters. Law provides advice related to OPG's pension and nuclear funds; real estate;
- 31 Bruce lease and related agreements and water resources; municipal approvals and land

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- 1 use planning; energy markets and regulatory matters, including the OEB payment
- 2 amount application; environmental approvals and compliance; nuclear licensing;
- 3 litigation; First Nations and Métis issues; freedom of information request; occupational
- 4 health and safety compliance; and labour employment and privacy law.

5

Corporate Relations and Communications

- 7 Corporate Relations and Communications supports all of OPG's business units by
- 8 directing the planning and delivery of communications and issue management advice,
- 9 guidance and services to support the business units' ongoing efforts to earn and
- 10 maintain the public franchise to operate facilities in Ontario. This includes the
- development of communications and issue management strategies to improve OPG's
- 12 relations with host communities, and further their understanding of the company as a
- 13 safe, reliable, environmentally responsible operator and steward of the Province's
- 14 generating assets.

1516

Corporate Business Development and Enterprise Risk Management

- 17 Corporate Business Development ("CBD") is responsible for developing and maintaining
- 18 an integrated corporate business development strategy to assess and recommend new
- business opportunities; establish and maintain an integrated portfolio-based generation
- and site asset strategy; and develop and implement external and internal partnerships in
- 21 support of the corporate strategy. CBD explores the concept and definition of major
- 22 hydroelectric and thermal generation development projects as well as other business
- 23 development initiatives. CBD also anticipates and develops strategies to deal with
- 24 project opportunities and challenges.

25

- 26 Enterprise Risk Management provides a framework that enables the organization to
- effectively identify, assess, monitor, and report on the key strategic, emerging, external,
- 28 operational, financial, and transactional risks to the Corporation's objectives.

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<u>Assurance</u>

- 2 The Assurance group includes Internal Audit and Nuclear Oversight. Internal Audit
- 3 provides independent, objective assurance of the organization's operations; evaluates
- 4 the effectiveness of governance and controls; and, maintains a strategic audit plan which
- 5 includes key risk audits, mandatory audits, cyclical audits, major project audits, contract
- 6 audits and other audits and reviews. Nuclear Oversight provides assurance that the
- 7 Nuclear Management System (a condition of OPG's operating license) is effectively
- 8 implemented in accordance with OPG's charter.

9

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- Exhibit F3-1-1 Table 3 summarizes Corporate Centre costs allocated to nuclear over the
- 11 historical, bridge, and test years.

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4.0 BENCHMARKING STUDY

- 14 In the EB-2013-0321 Decision (p. 95), OPG was directed to undertake an independent
- benchmarking study of corporate support functions and costs given the significant
- 16 changes resulting from the Business Transformation initiative. The Hackett Group
- 17 ("Hackett") carried out an independent benchmarking study in respect of that direction,
- which is filed as Attachment 1 to this Exhibit.

19

- 20 The study benchmarked OPG against peers in 2010 (before the start of the Business
- 21 Transformation initiative) and in 2014 to show results in a manner that facilitates a
- 22 transparent comparison before and after the Business Transformation initiative.
- 23 Corporate costs assigned and allocated to both nuclear and regulated hydroelectric
- businesses were included in the scope of the benchmarking study.

25

- 26 OPG followed Hackett's independent benchmark methodology to enable OPG's
- 27 corporate support functions and costs to be benchmarked against peers on a
- 28 comparable basis.

- 30 Hackett normalized OPG's corporate costs based on key demand drivers for each
- function. For IT, number of end users was used to benchmark costs per end user. For

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- 1 HR, number of employees was used to benchmark costs per employee. For Finance and
- 2 Executive and Corporate Services ("ECS"), revenues were used to benchmark costs as
- 3 a percentage of revenues.

4

- 5 The benchmarking study found that OPG's regulated corporate function costs declined
- 6 10 per cent from 2010 to 2014 while total regulated OPG headcount declined 11 per
- 7 cent. It also found that OPG's overall cost benchmark performance at the functional level
- 8 improved between 2010 and 2014 while comparisons to peer benchmarks varied by
- 9 function, as shown in Figure 1.

1011

Figure 1: Summary of Corporate Cost Benchmarking Results

Line		OPG 2010	OPG 2014	Peer	OPG Improvement 2010 - 2014 (%)
No.	Corporate Function	(a)	(b)	(c)	(d)
1	IT Cost per End User	\$12,015	\$9,541	\$14,995	21%
2	HR Cost per Employee	\$3,400	\$3,375	\$3,350	1%
3	Finance Cost as a Percent of Revenue	1.02%	0.75%	0.66%	26%
4	ECS Cost as a Percent of Revenue	3.39%	2.75%	1.07%	19%

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As shown in Figure 1:

- OPG's IT cost per end user decreased between 2010 and 2014 by 21 per cent and was 36 per cent less than the peer benchmark
- OPG's HR cost per employee remained relatively flat between 2010 and 2014 and was in closer proximity to the peer benchmark
- OPG's Finance cost as a percentage of revenue significantly closed the gap to peer decreasing by approximately 26 per cent between 2010 and 2014.
- OPG's ECS cost as a percentage of revenue was reduced by approximately 19 per cent between 2010 and 2014. ECS is comprised of 11 diverse subcategories.¹

¹ The 11 sub-categories are: Administrative Services, Transportation Services, Real Estate and Facilities Management, Government Affairs, Legal (includes Regulatory Affairs), Quality Management, Risk

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1

The most significant challenges were faced in the ECS areas of Risk Management and Environmental, Health and Safety; Procurement; and, Real Estate and Facilities Management. These were the ECS areas where OPG's costs were most significant and where the gap between OPG and peers was greatest.

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OPG's costs associated with Risk Management and Environmental, Health and Safety, and Procurement continue to be driven by nuclear-specific requirements and commitment to upholding OPG's social license to operate. OPG's adherence to strict CNSC regulations and its robust safety and environmental programs are examples of key cost drivers in these areas. OPG's nuclear stations have well-established environmental monitoring programs that are designed to assess impacts on human health and the environment, demonstrate compliance with regulatory limits, validate the effectiveness of containment and effluent controls, and verify predictions made by environmental risk assessments. For example, in addition to all of the conventional environmental requirements, OPG conducts a radiological environmental monitoring program to assess, among other things, radiation exposure to members of the public from OPG's nuclear generating stations. The Procurement function must address the significant quality requirements for materials that are used in nuclear facilities. In addition, the cost of Procurement activities is affected by aging assets, parts obsolescence and the limited market availability of nuclear qualified suppliers. The majority of the utilities included in OPG's peer benchmarking group were not nuclear power producers and therefore do not have the same breadth of requirements as OPG in these areas.

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OPG's Real Estate and Facilities Management costs continue to be driven by business requirements associated with the large number of nuclear and hydroelectric facilities and the geographic spread of the facilities across the province. As noted in Attachment 1 (p. 16), OPG's Real Estate and Facilities Management costs included all facility costs

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- 1 associated with its corporate regulated operations, including facility costs associated
- with IT, HR and Finance functions. Such facility costs were embedded in each particular
- 3 function for OPG's peers. This limitation had an unfavourable impact on OPG's Real
- 4 Estate and Facilities Management performance.

In addition, OPG's performance in relation to the peer benchmarks for each function is significantly influenced by its labour costs. This is also reflected in OPG's performance in the compensation benchmarking study carried out by Willis Towers Watson provided at Ex. F4-3-1 Attachment 2. As described in Ex. F4-3-1, OPG's regulated staff work in a predominantly unionized environment, with approximately 90 per cent of staff belonging to either the PWU or the Society. Given the extent of unionization, collective bargaining plays a dominant role in determining OPG's labour costs. Collective bargaining directly affects the wages and incentives provided to unionized employees, as well as the pensions and benefits they earn. Collective bargaining also has an indirect impact on the compensation provided to non-unionized positions because internal equity, career development and attracting experienced employees into management positions are important factors in workforce planning and development. As a result, OPG's performance in relation to the peer benchmarks in the Hackett study would be impacted to the extent that utilities in OPG's peer group are non-unionized and do not have the same collective bargaining requirements.

5.0 METHODS OF ALLOCATION

The cost allocation methodology is the same as was previously evaluated and accepted by the OEB in EB-2013-0321, EB-2010-0008 and EB-2007-0905. The cost allocation methodology uses two methods to distribute costs among the business units: direct assignment and allocation. In 2013, OPG's allocation methodology was also independently evaluated by HSG Group Inc and the report was filed to the OEB as part of EB-2013-0321 at Ex. F5-5-1.

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5.1 Direct Assignment

- 2 Direct assignment is used when specific resources, both individual employees and
- 3 specific cost items, used by a particular business unit can be reasonably established.
- 4 There is specific identification of resources where there is a direct relationship between
- 5 the costs incurred by a support group and the business unit that causes the costs to be
- 6 incurred. Estimation of the resources used by the business unit may be based on current
- 7 time estimates or historical activity.

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5.2 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. There are two types of cost drivers: external and internal drivers. 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 LAN ID's. 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 people being supervised.

1920

23

- 21 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 unit are assigned to it.
- Labour costs associated with individuals who support only one business unit are
 assigned to it.
 - Non-labour costs directly caused by one business unit are assigned to it.

27

- Step Two Estimation of Resources
- 29 The next step is to identify the resources in each department that directly support more
- 30 than one business unit and to estimate the resources attributable to each business unit.

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- 1 The costs of these resources are directly assigned to each business unit in proportion to
- 2 the estimated time required by that business unit.

3

- Step Three Assign Cost Drivers
- 5 OPG uses the appropriate standardized cost drivers for all remaining activities or
- 6 expenses.

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1		ATTACHMENTS
2		
3	Attachment 1:	Benchmarking Study of OPG's Corporate Support Functions and
4		Costs prepared by The Hackett Group
5		
6	Note: Attachmen	t 1 is marked "Confidential", however, OPG has determined it to be non
7	confidential in its	entirety.

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Benchmarking Study of OPG's Corporate Support Functions and Costs

April 2016

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- **Peer Overview**
- Results
- Appendix

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Executive Summary

Overview

- Ontario Power Generation (OPG) has engaged The Hackett Group to perform an independent benchmarking study of OPG's corporate support functions and costs
- Hackett leveraged its benchmarking and business process implementation expertise to deliver the following cost assessment to Peers for 2010 and 2014

General Observations

- OPG's total corporate function costs declined 10% from 2010 to 2014 while total OPG headcount declined 11%
- OPG's overall cost benchmark performance at the functional level improved between 2010 and 2014 while comparisons to peer benchmarks vary by function



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- **Peer Overview**
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Objectives in completing the benchmark

- Perform an independent benchmarking study of OPG's corporate support functions and costs. The
 results of this study will need to be shown in a manner that facilitates transparent comparison before
 and after OPG's Business Transformation initiative.
- This study is in response to the Ontario Energy Board's direction to OPG in its EB-2013-0321
 Decision.

In 2011, OPG commenced the Business Transformation initiative to improve its cost structure and to design a more efficient and effective organization. This initiative led to the creation of a centre-led organizational structure, reduced the number of OPG employees and introduced changes to eliminate work, improve processes and achieve efficiencies. The Business Transformation Initiative is described further at Ex. A4-1-1 of OPG's EB-2013-0321 evidence.



Benchmark Methodology

Data Guidelines and Benchmark Scope

- Geographic Scope:
 - All OPG regulated operations
- Benchmark data collection period = Fiscal Year 2010 and 2014
- All data is represented in 2014 Canadian Dollars for comparison purposes
 - PPP (Purchasing Power Parity) was used to adjust the peer data from US to Canadian dollars
 - A 2%/year inflation rate was applied to the peer companies and OPG's 2010 costs/revenue to normalize the data to 2014 Canadian Dollars
- Out of Scope The below items were not included in the benchmark to facilitate an apples to apples comparisons to the peer
 - All offices or operations of the unregulated portion of OPG
 - Direct functions of the Darlington Refurbishment Project
 - Integrated Revenue Planning, Electricity Sales & Trading, Commercial Contracts and Corporate Business Development
 - For Finance: Revenue cycle, Fund Management, nuclear-specific costs (e.g., nuclear insurance)
 - For Human Resources: Workforce Development Services (training)
 - For Executive and Corporate Services (ECS): Security, Cafeteria and Catering, Travel Services, Legal – Mergers and Acquisitions (M&A), nuclear-specific costs (e.g. nuclear facilities costs); Within Procurement, warehouse management & logistics and product development, design & support

Benchmark Comparisons

 Peer Group – represents the median of a custom group of companies in multiple industries that have similar size and business complexity to OPG

Normalization of Benchmark Data

- Data has been normalized based on the key demand drivers for each function:
 - Finance, ECS = Revenue (\$4.237B in 2010 and \$4.849B in 2014)
 - IT = End User Equivalents (11,011 in 2010, 12,267 in 2014)
 - HR = Employees (10,305 in 2010 and 9,292 in 2014)

Revenue: External Revenue Only, intercompany revenue not included. OPG includes revenue associated with regulated operations only. OPG revenue is adjusted to account for revenue deferred to future periods and to include revenue in 2010 from newly regulated hydroelectric facilities to facilitate transparent comparison before and after OPG's Business Transformation initiative.

Employees: Full-time, part-time, seasonal, and contingent employees. OPG includes employees associated with regulated operations only. End User: An individual (typically either an employee or contractor) that spends at least 10% of his or her time using a company provided, funded, supported computing device that is part of the company's IT infrastructure (i.e. desktops, laptops, hand held devices, etc.) to support his or her business function. The user must have direct access to internal applications / systems to execute specific transactions on behalf of the company. OPG includes end users associated with regulated operations only.



Hackett has a robust and well-defined taxonomy

General & Administrative Scope (G&A)

Finance

Accounts Payable; Travel & Expenses

- Credit, Customer Billing, Collections,
 Dispute Management, Cash Application
- General Ledger, Enterprise Consolidation, Intercompany & Cost Accounting,
 Fixed Assets, External Reporting
- Tax Management
- · Cash, Capital & Risk Management
- · Compliance Management
- Strategic Business Planning Support, Annual Planning, Forecasting, Business Performance Reporting
- · Business Analysis
- · Function Management

HR

- Health & Welfare, Pension & Savings, Compensation Administration
- · Payroll, Time & Attendance
- Employee Data Mgmt. and HR Reporting, Compliance Management
- · Recruiting & Staffing, Exit Process
- Transferable, Non-transferable Skills
- Organization Design & Development, Employee Relations
- · Labor Relations
- Total Rewards Planning
- · Strategic Workforce Planning
- · Function Management

ΙT

- IT Business PlanningEnterprise Architecture Planning
- · Emerging Technologies
- · Infrastructure Development
- Application Development
- · Quality Assurance
- · Infrastructure Management
- End User Support
- Application Maintenance
- Risk and Function Management

Executive & Corporate Services (ECS)

- · Administrative Services
- Travel and Transportation Services
- Real Estate & Facilities Management
- · Government Affairs
- Legal
- · Quality Management
- Risk, Environment Health and Safety, and Security Management
- Corporate Communications
- · Planning and Strategy
- Executive Office
- Procurement

Hackett's process taxonomy is applied independent of OPG's organizational structure and functional reporting lines, thereby facilitating an "apples-to-apples" comparison

Functions in grey font were excluded from the benchmark



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OPG Peer Group

Composite Peer Group

Ameren Corporation

American Water

Areva SA

Arizona Public Service Company

Black Hills Corporation

CMS Energy Corporation

Constellation Energy Resources, LLC

Contour Global Ltd.

ENMAX Corporation

Florida Power & Light Company

Lower Colorado River Authority

National Grid plc

NiSource Inc

NorthWestern Corporation

Pepco Holdings, Inc.

Public Service Energy Group

RRI Energy, Inc

SaskPower

We Energies

<u>Peer Group Nuclear Operators:</u> Ameren Corp, Areva, Arizona Public Service Company, Constellation Energy Resources, Florida Power and Light, Public Service Energy Group









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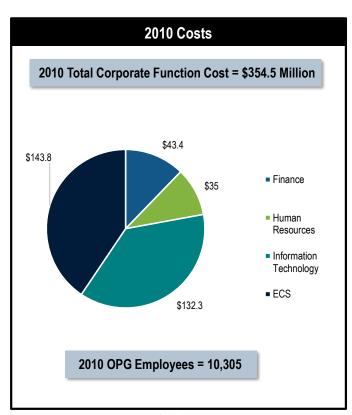
- Executive Summary
- Benchmark Objectives and Methodology
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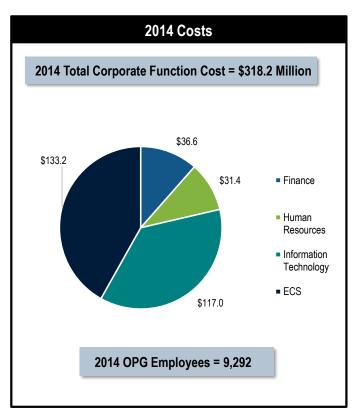
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Overall costs declined 10% from 2010 to 2014 while headcount declined 11%. OPG's costs declined 12% in IT, 10% in HR, 16% in Finance and 7% in ECS

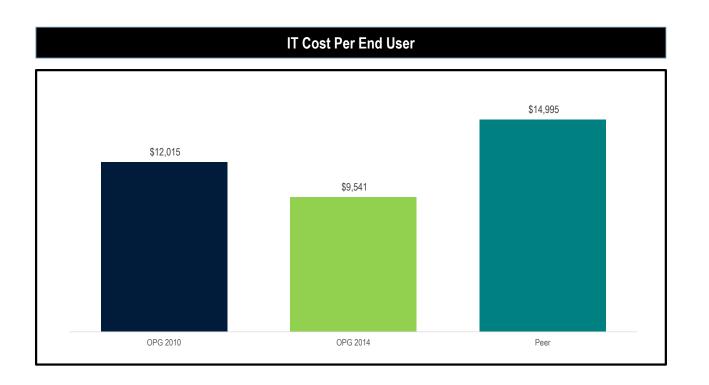




*2010 costs have been adjusted for inflation

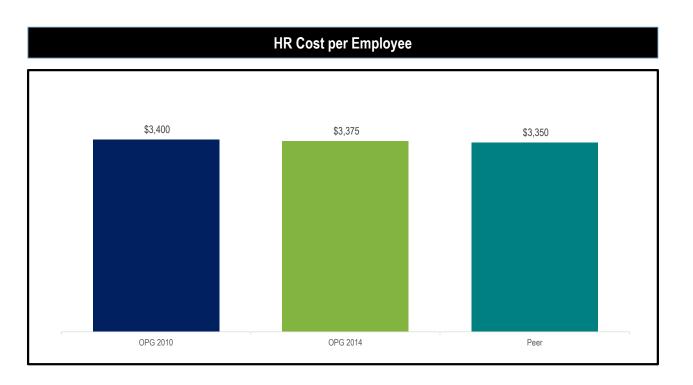


OPG IT Cost Per End User has decreased since 2010 and is 36% less than Peers



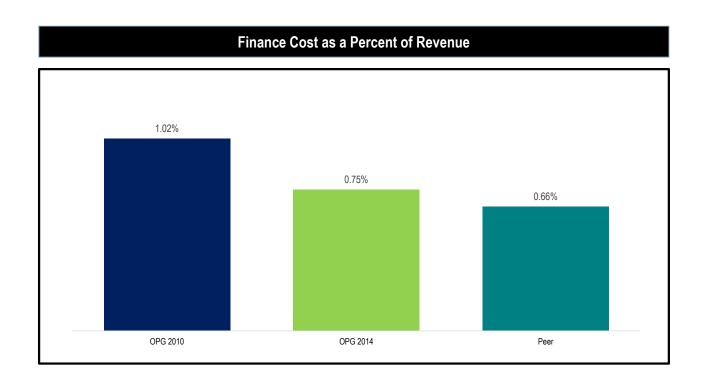


OPG HR Cost per Employee has remained relatively flat from 2010 to 2014 and is in closer proximity to peer



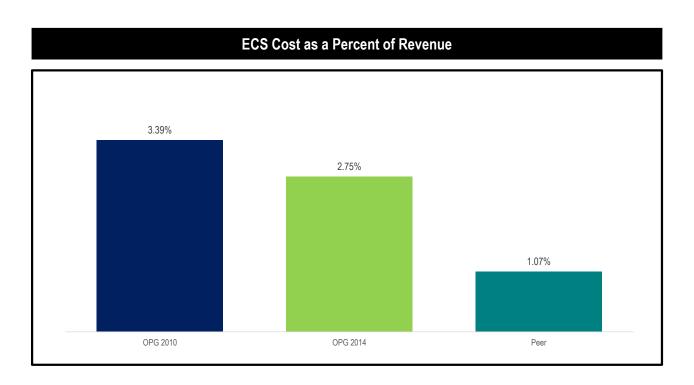


OPG Finance has significantly closed the gap to peer decreasing Finance cost as a Percent of Revenue 26% from 2010 to 2014



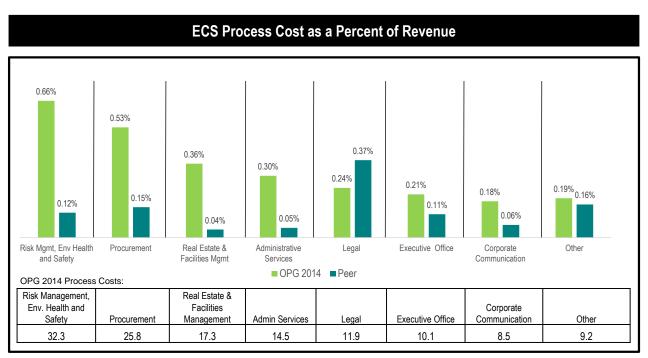


OPG ECS Cost as a Percent of Revenue has been reduced by approximately 19% but still has opportunities compared to the Peer





OPG ECS has opportunities to peer especially in the areas of Risk Management and EHS, Procurement, and Real Estate



^{*}Numbers may not sum due to rounding

^{*}Other processes include: Transportation, Quality Management, Government Affairs, and Planning and Strategy



^{*}Real Estate and Facilities Management: OPG's cost for this sub-category includes all facility costs associated with corporate regulated operations including facility costs associated with IT, HR, and Finance functions. Such facility costs are embedded in each particular function for OPG's peer

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About The Hackett Group

Profile & Mission

- The Hackett Group is an Intellectual Property based consultancy focusing on enabling General and Administrative performance improvement through leveraging our intellectual capital, based on over 7,500 benchmarks and performance studies
 - More than 20,000 performance metrics
 - More than 1,900 best practices
 - Best practice process flows and configuration guides

Approach

- We help clients to measure current performance compared to peers and World-class performers
- We identify project opportunities and develop a business case leading to an actionable roadmap, supported by a Transformation Management Office
- We implement recommended change and empower our clients to improve the organization, processes and the culture that enable agility, leading to sustainable growth

Results

 Sustainable performance improvement leading to an agile enterprise with lower costs, higher quality and better margins





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Filed: 2016-05-27 EB-2016-0152 Exhibit F3 Tab 1 Schedule 1 Table 1

Table 1

<u>Corporate Support & Administrative Groups - OPG (\$M)</u>

Line		2013	2014	2015	2016	2017	2018	2019	2020	2021
No.	Corporate Costs	Actual	Actual	Actual	Budget	Plan	Plan	Plan	Plan	Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	Business and Administrative Service ¹	295.6	281.7	285.5	292.5	292.4	284.4	286.6	287.1	289.6
2	Finance	63.9	59.0	51.4	57.5	58.1	56.0	55.7	54.9	55.8
3	People and Culture	115.1	118.1	115.9	111.2	115.0	113.7	116.3	117.3	119.3
4	Commercial Operations and Environment	37.4	43.0	37.2	44.0	42.8	40.9	41.9	41.3	44.8
5	Corporate Centre	50.8	47.4	61.9	68.2	65.4	65.5	65.7	66.9	67.8
6	Total	562.8	549.2	551.9	573.4	573.7	560.5	566.2	567.5	577.3

Notes:

1 Business and Administrative Service costs exclude amounts captured in the Asset Service Fee.

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Exhibit F3

Tab 1

Schedule 1

Table 2

Table 2
Allocation of Corporate Support & Administrative Costs - Regulated Hydroelectric (\$M)

Intentionally left blank (See Ex. A1-3-1)

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Table 3

Table 3

<u>Allocation of Corporate Support & Administrative Costs - Nuclear (\$M)</u>

Line		2013	2014	2015	2016	2017	2018	2019	2020	2021
No.	Corporate Group	Actual	Actual	Actual	Budget	Plan	Plan	Plan	Plan	Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	Business and Administrative Service	246.6	227.2	231.0	245.0	246.1	239.1	241.0	242.3	246.1
2	Finance	46.3	44.4	35.6	40.2	41.5	39.4	39.0	38.8	39.9
3	People and Culture	91.6	98.2	95.8	92.4	96.2	95.3	97.8	98.5	100.5
4	Commercial Operations and Environment	14.7	19.5	16.8	20.4	20.2	18.9	19.9	19.6	21.8
5	Corporate Centre	29.2	26.9	39.6	44.3	44.9	44.5	45.0	45.8	45.8
6	Total	428.4	416.2	418.8	442.3	448.9	437.2	442.7	445.0	454.1

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Table 4
Allocation of Finance Costs - Regulated Hydroelectric (\$M)

Intentionally left blank (See Ex. A1-3-1)

Filed: 2016-05-27 EB-2016-0152 Exhibit F3 Tab 1 Schedule 1 Table 5

Table 5
<u>Allocation of Finance Costs - Nuclear (\$M)</u>

Line		2013	2014	2015	2016	2017	2018	2019	2020	2021
No.	Costs	Actual	Actual	Actual	Budget	Plan	Plan	Plan	Plan	Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	Controllership	30.0	28.7	30.9	35.9	36.5	34.6	34.4	34.3	35.5
2	Investment Planning	2.9	2.3	1.0	1.2	1.2	1.1	1.2	0.9	0.7
3	Assurance ¹	8.4	8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	Treasury & Fund Management	2.8	2.6	2.1	2.9	3.0	3.0	3.2	3.1	3.2
5	CFO Office	2.2	2.4	1.5	0.2	0.8	0.7	0.2	0.5	0.5
6	Total	46.3	44.4	35.6	40.2	41.5	39.4	39.0	38.8	39.9

Notes:

1 Moved to Corporate Centre during organizational change in 2015.

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Exhibit F3

Tab 1

Schedule 1

Table 6

Table 6
Allocation of Business and Administrative Service Costs - Regulated Hydroelectric (\$M)

Intentionally left blank (See Ex. A1-3-1)

Filed: 2016-05-27 EB-2016-0152 Exhibit F3 Tab 1 Schedule 1 Table 7

Table 7

<u>Allocation of Business and Administrative Service Costs - Nuclear (\$M)</u>

Line		2013	2014	2015	2016	2017	2018	2019	2020	2021
No.	Costs	Actual	Actual	Actual	Budget	Plan	Plan	Plan	Plan	Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	Infrastructure Management	27.3	26.7	25.8	22.9	22.2	21.4	21.4	20.6	20.0
2	Application Maintenance	12.2	11.9	11.5	10.2	9.9	9.5	9.5	9.2	8.9
3	Data Centre Services	12.4	12.1	11.7	10.4	10.0	9.7	9.7	9.3	9.0
4	Other Services	4.0	3.9	3.8	3.3	3.2	3.1	3.1	3.0	2.9
5	NHSS Base Costs	55.9	54.6	52.7	46.8	45.3	43.7	43.7	42.1	40.8
	IT Commont Coate	25.0	20.0	27.0	44.0	40.7	40.0	40.0	40.7	40.0
6	IT Support Costs	35.9	36.6	37.3	41.8	43.7	42.6	42.3	42.7	43.2
7	IT Costs (line 6 + line 7)	91.8	91.2	90.0	88.6	89.0	86.3	86.0	84.8	84.0
8	Supply Chain	48.6	42.5	41.1	47.6	47.3	46.7	47.8	49.2	50.3
9	Real Estate	88.4	83.3	82.5	89.9	94.5	92.8	95.0	95.5	98.7
10	OM&A Project Costs	17.8	10.2	17.4	18.9	15.3	13.3	12.2	12.8	13.1
11	Total	246.6	227.2	231.0	245.0	246.1	239.1	241.0	242.3	246.1

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Table 8
Allocation of People and Culture Costs - Regulated Hydroelectric (\$M)

Intentionally left blank (See Ex. A1-3-1)

Filed: 2016-05-27 EB-2016-0152

Exhibit F3

Tab 1

Schedule 1

Table 9

Table 9

<u>Allocation of People and Culture Costs - Nuclear (\$M)</u>

Line No.	Costs	2013 Actual	2014 Actual	2015 Actual	2016 Budget	2017 Plan	2018 Plan	2019 Plan	2020 Plan	2021 Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	Business Partners	4.1	3.7	3.2	3.2	3.4	3.5	3.5	3.5	3.6
2	Total Rewards & Solutions	9.3	10.0	10.1	10.2	10.5	10.4	10.6	10.8	11.0
3	Heath & Safety Employee & Labour Relations	11.4	12.0	10.5	11.2	12.0	11.7	11.7	12.2	12.8
4	SVP Office	6.2	7.2	5.4	3.7	4.0	4.4	4.8	4.8	5.0
5	Talent Management & Business Change	1.9	2.6	4.9	4.8	4.7	4.4	4.4	4.5	4.6
6	Learning & Development	58.7	62.7	61.7	59.3	61.6	60.9	62.8	62.7	63.5
7	Total	91.6	98.2	95.8	92.4	96.2	95.3	97.8	98.5	100.5

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COMPARISON OF ALLOCATION OF 1 SUPPORT SERVICES COSTS 2 3 4 1.0 **PURPOSE** 5 This evidence describes the period-over-period changes in the Support Services costs. 6 7 2.0 PERIOD-OVER-PERIOD CHANGES - TEST YEARS, NUCLEAR 8 Exhibit F3-1-2 Table 2 provides the period-over-period changes in the allocated Support 9 Services costs for the test years. 10 11 2017 Plan versus 2016 Budget (\$448.9M versus \$442.3M) 12 Support Services costs remain relatively stable from 2016 to 2017. 13 14 2018 Plan versus 2017 Plan (\$437.2M versus \$448.9M) 15 Support Services costs remain relatively stable from 2017 to 2018. 16 17 2019 Plan versus 2018 Plan (\$442.7M versus \$437.2M) 18 Support Services costs remain relatively stable from 2018 to 2019. 19 20 2020 Plan versus 2019 Plan (\$445.0M versus \$442.7M) 21 Support Services costs remain relatively stable from 2019 to 2020. 22 23 2021 Plan versus 2020 Plan (\$454.1M versus \$445.0M) 24 Support Services costs remain relatively stable from 2020 to 2021. 25 26 3.0 PERIOD-OVER-PERIOD CHANGES - BRIDGE YEAR, NUCLEAR 27 Exhibit F3-1-2 Table 2 provides the period-over-period changes in the allocated Support 28 Services costs for the bridge year. 29 30 2016 Budget versus 2015 Actual (\$442.3M versus \$418.8M) 31 Support Services costs remain relatively stable from 2015 to 2016.

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1

4.0 PERIOD-OVER-PERIOD CHANGES - HISTORICAL YEARS, NUCLEAR

3 Exhibit F3-1-2 Table 2 provides the period-over-period changes for the historical period.

4

- 5 <u>2015 Actual versus 2015 OEB Approved (\$418.8MM versus \$417.4M)</u>
- 6 Support Services actual costs in 2015 were in-line with the OEB-approved amount.

7

- 8 <u>2015 Actual versus 2014 Actual (\$418.8M versus \$416.2M)</u>
- 9 Support Services costs remain relatively stable from 2014 to 2015.

10

- 11 <u>2014 Actual versus 2014 OEB Approved (\$416.2M versus \$433.9M)</u>
- 12 Support Services actual costs in 2014 were in-line with the OEB-approved amount.

13

- 14 <u>2014 Actual versus 2013 Actual (\$416.2M versus \$428.4M)</u>
- 15 Support Services costs remain relatively stable from 2013 to 2014.

16

- 17 <u>2013 Actual versus 2013 Budget (\$428.4M versus \$451M)</u>
- 18 Support Services actual costs in 2013 were in-line with the budget.

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Table 1

Table 1
Comparison of Allocation of Corporate Support & Administrative Costs (\$M)
Regulated Hydroelectric

Intentionally left blank (See Ex. A1-3-1)

Filed: 2016-05-27 EB-2016-0152 Exhibit F3 Tab 1 Schedule 2 Table 2

Table 2
Comparison of Allocation of Corporate Support & Administrative Costs (\$M)
Nuclear

Line		2013	(c)-(a)	2013	(g)-(c)	2014	(g)-(e)	2014	(k)-(g)	2015	(k)-(i)	2015
No.	Business Unit	Budget	Change	Actual	Change	OEB Approved	Change	Actual	Change	OEB Approved	Change	Actual
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1	Business and Administrative Service	255.2	(8.6)	246.6	(19.4)	245.5	(18.3)	227.2	3.8	237.3	(6.3)	231.0
2	Finance	47.4	(1.1)	46.3	(1.9)	45.3	(0.9)	44.4	(8.8)	43.4	(7.8)	35.6
3	People and Culture	95.6	(4.0)	91.6	6.6	92.2	6.0	98.2	(2.4)	89.3	6.5	95.8
4	Commercial Operations and Environment	17.7	(3.0)	14.7	4.8	18.1	1.4	19.5	(2.7)	17.3	(0.5)	16.8
5	Corporate Centre	35.1	(5.9)	29.2	(2.3)	32.8	(5.9)	26.9	12.7	30.1	9.5	39.6
6	Total	451.0	(22.6)	428.4	(12.2)	433.9	(17.7)	416.2	2.6	417.4	1.4	418.8

Line		2015	(c)-(a)	2016	(e)-(c)	2017	(g)-(e)	2018	(i)-(g)	2019	(k)-(i)	2020
No.	Business Unit	Actual	Change	Budget	Change	Plan	Change	Plan	Change	Plan	Change	Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
7	Business and Administrative Service	231.0	14.0	245.0	1.1	246.1	(7.0)	239.1	1.9	241.0	1.3	242.3
8	Finance	35.6	4.6	40.2	1.3	41.5	(2.1)	39.4	(0.4)	39.0	(0.2)	38.8
9	People and Culture	95.8	(3.4)	92.4	3.8	96.2	(0.9)	95.3	2.5	97.8	0.7	98.5
10	Commercial Operations and Environment	16.8	3.6	20.4	(0.2)	20.2	(1.3)	18.9	1.0	19.9	(0.3)	19.6
11	Corporate Centre	39.6	4.7	44.3	0.6	44.9	(0.4)	44.5	0.5	45.0	0.8	45.8
12	Total	418.8	23.5	442.3	6.6	448.9	(11.7)	437.2	5.5	442.7	2.3	445.0

Line		2020	(c)-(a)	2021
No.	Business Unit	Plan	Change	Plan
		(a)	(b)	(c)
13	Business and Administrative Service	242.3	3.8	246.1
14	Finance	38.8	1.1	39.9
15	People and Culture	98.5	2.0	100.5
16	Commercial Operations and Env.	19.6	2.2	21.8
17	Corporate Centre	45.8	0.0	45.8
18	Total	445.0	9.1	454.1

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COMPARISON OF 1 REGULATORY AFFAIRS COSTS 2 3 4 1.0 **PURPOSE** 5 This exhibit describes the period-over-period changes in Regulatory Affairs Department costs 6 allocated to the regulated businesses. These costs are set out in Ex. F3-1-3, Table 1. 7 8 2.0 PERIOD-OVER-PERIOD CHANGES - TEST YEARS 9 2017 Plan versus 2016 Budget 10 Regulatory Affairs costs decrease by approximately \$0.9M in the 2017 Plan versus 2016 11 Budget. This is primarily due to lower consulting costs in 2017 on the expectation of 12 completing the majority of this proceeding in 2016. Labour costs are also expected to begin 13 declining in 2017 on the expectation of OPG beginning to move from cost of service 14 ratemaking on an approximately two-year cycle toward an incentive ratemaking mechanism 15 on an approximately five-year cycle. 16 17 2018 Plan versus 2017 Plan 18 Regulatory Affairs costs decrease by approximately \$1.0M in the 2018 Plan versus the 2017 19 Plan primarily because there are no major rate cases scheduled to be filed by OPG in 2018. 20 OPG will begin preparations for a mid-term review following from this proceeding (see Ex. 21 A3-2-2). 22 23 2019 Plan versus 2018 Plan 24 Regulatory Affairs costs increase by approximately \$0.4M in the 2019 Plan versus the 2018 25 Plan. This increase is primarily the result of costs planned for the mid-term review as 26 discussed in Ex. A3-2-2. 27 28 2020 Plan versus 2019 Plan 29 Regulatory Affairs costs decrease by approximately \$0.4M in the 2020 Plan versus the 2019 30 Plan, primarily because no major rate cases are scheduled to be filed by OPG in 2020.

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1 **2021 Plan versus 2020 Plan**

- 2 Regulatory Affairs costs increase by approximately \$2.0M in the 2021 Plan versus the 2020
- 3 Plan. This increase is driven primarily by an increase in Expert Witness/Consultants costs
- 4 (approximately \$1.2M) and Intervenor Cost Awards (approximately \$0.7M), in recognition of
- 5 anticipated costs to prepare for OPG's 2022 major rates application.

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7 3.0 PERIOD-OVER-PERIOD CHANGES – BRIDGE YEAR

8 2016 Budget versus 2015 Actual

- 9 Regulatory Affairs costs in the 2016 budget are approximately \$2.7M higher than 2015
- 10 actual. This increase is driven by an increase in Expert Witness/Consultants costs
- 11 (approximately \$1.2M) and Intervenor Cost Awards (approximately \$0.9M). The increase is
- 12 primarily due to costs associated with this proceeding.

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4.0 PERIOD-OVER-PERIOD CHANGES - HISTORICAL YEARS

15 **2015 Actual versus 2015 OEB Approved**

- Regulatory Affairs costs in 2015 were approximately \$2.5M lower than 2015 OEB approved.
- 17 This was largely due to the deferral of this proceeding from 2015 to 2016.

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2015 Actual versus 2014 Actual

- 20 Regulatory Affairs costs in 2015 were approximately \$2.1M lower than 2014 Actual. This was
- 21 due mainly to the high costs experienced in 2014 for the EB-2013-0321 rates case, whereas
- 22 2015 experienced costs primarily for the EB-2014-0370 Deferral and Variance Accounts
- 23 hearing, which were significantly lower.

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2014 Actual versus 2014 OEB Approved

- 26 Regulatory Affairs costs in 2014 were approximately \$2.5M lower than 2014 OEB approved,
- 27 driven mainly by lower than expected costs for intervenor cost awards. OPG had anticipated
- 28 to be filing unprecedented types of applications (e.g., OPG's first IRM application for
- 29 hydroelectric) which were expected to require lengthy and complicated hearings, and had
- 30 included \$2.2M in intervenor costs in 2014 OEB approved. Instead, OPG filed a cost of
- 31 service application (EB-2013-0321) and incurred costs more typical for that type of hearing.

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2014 Actual versus 2013 Actual

Regulatory Affairs costs in 2014 were approximately \$0.6M higher than 2013 actual. The main drivers of this increase were \$0.3M in expert witnesses/consultants and \$0.2M in OEB annual assessments and section 30 fees. The main reason for these increased costs was the EB-2013-0321 rates case, for which significant costs were incurred in both 2013 (preparation of application) and 2014 (OEB proceeding) but more so in 2014.

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2013 Actual versus 2013 Budget

Regulatory Affairs costs were approximately \$2.8M lower in 2013 than budgeted. The 2013 Budget assumed a cost of service application for regulated hydroelectric and a Niagara prudence review proceeding. In actuality, OPG filed a cost of service application for both the regulated hydroelectric and nuclear businesses since this application was filed late in 2013 (September 27, 2013). Many costs associated with activities after the initial filing date were incurred in 2014.

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External legal costs in 2013 were approximately \$0.8M lower than 2013 budget, with the main driver being the deferral of the cost of service application to the latter part of the year.

Numbers may not add due to rounding.

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Filed: 2016-05-27 EB-2016-0152 Exhibit F3 Tab 1 Schedule 3 Table 1

Table 1
Comparison of Base OM&A Costs Allocated to Regulated Operations (\$K)

Regulatory Affairs Department

Line		2013	(c)-(a)	2013	(g)-(c)	2014	(g)-(e)	2014	(k)-(g)	2015	(k)-(i)	2015
No.	Group	Budget	Change	Actual	Change	OEB Approved	Change	Actual	Change	OEB Approved	Change	Actual
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	Recurring Costs:											
1	Salaries/wages, operating expenses	3,309.5	(813.3)	2,496.2	332.4	3,549.5	(720.9)	2,828.6	(22.0)	3,363.7	(557.1)	2,806.6
	Regulatory Proceeding Costs:											
2	Expert Witnesses/Consultants	1,700.0	(547.9)	1,152.1	332.9	1,700.0	(215.0)	1,485.1	(1,201.1)	1,200.0	(916.0)	284.0
3	Intervenor cost awards	2,200.0	(951.3)	1,248.7	(233.4)	2,200.0	(1,184.7)	1,015.3	(881.1)	1,000.0	(865.8)	134.2
4	Other	200.0	(103.7)	96.3	8.2	230.0	(125.5)	104.5	19.5	240.0	(116.0)	124.0
5	Total Regulatory Proceeding Costs	4,100.0	(1,602.9)	2,497.1	107.8	4,130.0	(1,525.2)	2,604.8	(2,062.6)	2,440.0	(1,897.8)	542.2
6	OEB Annual Assessment and Sect 30	1,500.0	(398.8)	1,101.2	154.8	1,500.0	(244.0)	1,256.0	(34.0)	1,300.0	(78.0)	1,222.0
7	Total Regulatory Affairs Division	8,909.5	(2,815.0)	6,094.5	594.9	9,179.5	(2,490.1)	6,689.4	(2,118.6)	7,103.7	(2,532.9)	4,570.8
8	External Legal Costs	1,100.0	(800.0)	300.0	900.0	1,100.0	100.0	1,200.0	(200.0)	1,100.0	(100.0)	1,000.0

Line		2015	(c)-(a)	2016	(e)-(c)	2017	(g)-(e)	2018	(i)-(g)	2019	(k)-(i)	2020
No.	Group	Actual	Change	Budget	Change	Plan	Change	Plan	Change	Plan	Change	Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
	Recurring Costs:											
9	Salaries/wages, operating expenses	2,806.6	450.0	3,256.6	(117.9)	3,138.7	(163.7)	2,975.0	(202.3)	2,772.7	48.8	2,821.5
	Regulatory Proceeding Costs:											
10	Expert Witnesses/Consultants	284.0	1,216.0	1,500.0	(750.0)	750.0	(250.0)	500.0	200.0	700.0	(169.6)	530.5
11	Intervenor cost awards	134.2	865.8	1,000.0	0.0	1,000.0	(600.0)	400.0	400.0	800.0	(375.6)	424.4
12	Other	124.0	76.0	200.0	10.0	210.0	10.0	220.0	6.6	226.6	6.8	233.4
13	Total Regulatory Proceeding Costs	542.2	2,157.8	2,700.0	(740.0)	1,960.0	(840.0)	1,120.0	606.6	1,726.6	(538.4)	1,188.2
14	OEB Annual Assessment and Sect 30	1,222.0	78.0	1,300.0	0.0	1,300.0	0.0	1,300.0	39.0	1,339.0	40.2	1,379.2
15	Total Regulatory Affairs Division	4,570.8	2,685.8	7,256.6	(857.9)	6,398.7	(1,003.7)	5,395.0	443.3	5,838.3	(449.4)	5,388.9
16	External Legal Costs	1,000.0	500.0	1,500.0	0.0	1,500.0	0.0	1,500.0	(750.0)	750.0	(450.0)	300.0

Line		2020	(c)-(a)	2021
No.	Group	Plan	Change	Plan
		(a)	(b)	(c)
	Recurring Costs:			
17	Salaries/wages, operating expenses	2,821.5	41.7	2,863.2
	Regulatory Proceeding Costs:			
18	Expert Witnesses/Consultants	530.5	1,191.6	1,722.0
19	Intervenor cost awards	424.4	723.7	1,148.0
20	Other	233.4	4.7	238.1
21	Total Regulatory Proceeding Costs	1,188.2	1,919.9	3,108.1
22	OEB Annual Assessment and Sect 30	1,379.2	27.6	1,406.8
23	Total Regulatory Affairs Division	5,388.9	1,989.2	7,378.1
24	External Legal Costs	300.0	1,200.0	1,500.0

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ASSET SERVICE FEES

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1.0 PURPOSE

This evidence describes OPG's service fee methodology and explains the calculation of the proposed service fees for the test period.

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2.0 BACKGROUND

- Approximately 99 per cent of OPG's in-service fixed assets are directly associated with specific generation facilities. The remaining assets are either directly associated with a business unit, or are common assets used by both regulated and unregulated generation
- 11 facilities.

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The assets held centrally are not included in rate base and the depreciation and amortization expense in this rate submission does not include any depreciation or amortization related to these assets. Instead, the nuclear facilities (as well as regulated hydroelectric and unregulated facilities) are charged a service fee for the use of these assets, which is included in the nuclear OM&A expenses.

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The service fee methodology used in this Application is the same as that accepted by the OEB in EB-2013-0321, EB-2010-0008 and EB-2007-0905. Exhibit F3-2-1 Table 2 presents asset service fees for 2013 to 2021.

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3.0 ASSET SERVICE FEES

- Asset service fees are computed in a cost-based manner. The costs included in the computation of the service fees are depreciation expense, certain operating costs, property
- taxes, and a tax-adjusted return earned on these assets.

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- 28 The nuclear facilities are charged a service fee for the use of the following assets, which are
- 29 further discussed below:
- Kipling Site Building Complex (located in Toronto, Ontario)
- Wesleyville (located in Durham County, Ontario)

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Certain shared IT and Energy Markets Assets (together "IT Assets")

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The charts below provide nuclear service fee amounts for the years 2017 to 2021.

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Chart 1 7 Nuclear Asset Service Fee Amounts - 2017-2021

\$M	Kipling/ Wesleyville	IT Assets	Total
2017	3.3	24.6	27.9
2018	3.3	24.6	27.9
2019	3.4	24.9	28.3
2020	3.5	19.4	22.9
2021	3.5	17.2	20.7

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Kipling/Wesleyville

OPG's Kipling and Wesleyville sites are partially used by personnel from the regulated operations and support services that support them. The service fee for the use of the Kipling and Wesleyville sites is computed based on an allocation of depreciation expense, operating costs related to maintaining the building, property taxes, and a tax-adjusted return on the capital invested in these assets. The cost allocation is based on the principles of OPG's support services cost allocation methodology discussed in Ex. F3-1-1. Depreciation expense and property tax expense, as per OPG's budget for the year, are apportioned based on the relative square footage used by the regulated operations, including an amount for the support services supporting them. As per the cost allocation methodology, operating costs incurred by Real Estate to maintain the building are apportioned based on the relative square footage used by the regulated operations, including an amount for support services supporting them.

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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

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regulated operations as per Exhibit C. The return on equity component is grossed-up by OPG's budgeted statutory tax rate for the year in question. The tax-adjusted rate of return is applied to the average budgeted net book value of each building for the year, and then apportioned to each of the regulated facilities using relative square footage which is consistent with the allocation basis used to determine the depreciation expense in the Asset Service Fee.

The components used to establish the projected nuclear service fee for Kipling and Wesleyville for the years 2017 to 2021, respectively, are presented below:

Chart 2
Components of Nuclear Asset Service Fee for Kipling/Wesleyville – 2017-2021

\$M	2017	2018	2019	2020	2021
Depreciation Expense	0.5	0.6	0.7	0.7	0.8
Property Tax	0.4	0.4	0.4	0.4	0.5
Operating Costs	0.9	0.9	0.9	0.9	0.8
Tax-adjusted Return	1.5	1.4	1.4	1.5	1.4
Total	3.3	3.3	3.4	3.5	3.5

IT Assets

IT assets include computer systems and applications used throughout OPG, such as SAP and other enterprise resource planning systems, document management and archiving systems, computer network hardware and the remote access system, as well as, information technology systems, applications and infrastructure related to generation portfolio management, trading and origination activities, and related administrative functions such as transaction settlements.

These assets are used by personnel from the regulated operations and the support services that support them. The service fee for the use of IT assets is computed based on an

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appropriate portion of depreciation expense and a tax-adjusted return. The portion of the costs included in the service fee is based on the principles of OPG's cost allocation methodology discussed in Ex. F3-1-1. For the majority of IT assets, depreciation expense is apportioned using the relative number of business workstations used by the regulated operations and the portion of support services that support them.

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 Exhibit C. The return on equity component is grossed-up by OPG's budgeted statutory tax rate for the year in question. The tax-adjusted rate of return is applied to the average budgeted net book value of the assets for the year apportioned using the relative number of business workstations used by the regulated facilities and the portion of support services that support them. This is consistent with the allocation basis used to determine depreciation expense portion of the Asset Service Fee.

The components used to establish the service fee for IT Assets for the years 2017 to 2021, respectively, are presented below:

Chart 3

Components of Nuclear Asset Service Fee for IT Assets – 2017-2021

\$M	2017	2018	2019	2020	2021
Depreciation Expense	20.9	22.0	23.1	18.1	16.0
Tax-adjusted Return	3.7	2.6	1.8	1.3	1.2
Total	24.6	24.6	24.9	19.4	17.2

Shareholder Declaration and Resolution to Sell the Company's Head Office – 700 University

Avenue.

In December 2015, OPG received a Shareholder Declaration and Resolution that requires the Company to sell its head office premises in Toronto, Ontario. The Shareholder

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- 1 Resolution also requires OPG to transfer to the Province the portion of the proceeds from the
- 2 sale equal to the after-tax accounting gain on sale, net of transaction costs.

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- 4 As a result of this directive and consistent with OPG's approved business plan, the budgeted
- 5 service fee for 700 University Avenue has been discontinued, effective April 1, 2016. This
- 6 service fee has been replaced by budgeted lease payments, which are reflected in real
- 7 estate costs in Ex. F3-1-1 Table 7, effective April 1, 2016.

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Table 1
Asset Service Fees - Regulated Hydroelectric (\$M)

Intentionally left blank (See Ex. A1-3-1)

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Exhibit F3

Tab 2

Schedule 1

Table 2

Table 2
Asset Service Fees - Nuclear (\$M)

Line		2013	2014	2015	2016	2017	2018	2019	2020	2021
No.	Business Unit	Actual	Actual	Actual	Budget	Plan	Plan	Plan	Plan	Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	Nuclear	22.7	23.3	32.9	28.4	27.9	27.9	28.3	22.9	20.7

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COMPARISON OF ASSET SERVICE FEES 1 2 3 **PURPOSE** 1.0 4 This evidence presents the period-over-period changes in the asset service fees charged to 5 the nuclear business unit. 6 7 2.0 **OVERVIEW** 8 This evidence supports the approval sought for asset service fees. Exhibit F3-2-2 Table 2 9 provides a comparison of budget to actual amounts and the year-over-year asset service fee 10 costs for 2013 to 2021 for the nuclear business. 11 12 3.0 PERIOD-OVER-PERIOD CHANGES - TEST YEARS, NUCLEAR 13 2017 Plan versus 2016 Budget (\$27.9M versus \$28.4M) 14 Asset Service fees are relatively stable from 2016 to 2017. 15 16 2018 Plan versus 2017 Plan (\$27.9M versus \$27.9M) 17 No change. 18 19 2019 Plan versus 2018 Plan (\$28.3M versus \$27.9M) 20 Asset Service fees are relatively stable from 2018 to 2019. 21 22 2020 Plan versus 2019 Plan (\$22.9M versus \$28.3M) 23 The asset service fee for the nuclear business unit decreased by \$5.4M in 2020 compared to 24 2019 plan due to lower IT depreciation expense and tax-adjusted return. 25 26 2021 Plan versus 2020 Plan (\$20.7 versus \$22.9M) 27 The asset service fee for the nuclear business unit decreased by \$2.2M in 2021 compared to 28 2020 plan due to lower IT depreciation expense and tax-adjusted return. 29 30 4.0 PERIOD-OVER-PERIOD CHANGES - BRIDGE YEAR, NUCLEAR 31 2016 Budget versus 2015 Actual (\$28.4M versus \$32.9M)

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1 The asset service fee for the nuclear business unit decreased by \$4.5M in the 2016 budget

2 versus 2015 mainly due to the planned sale of OPG's Head Office.

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4 5.0 PERIOD-OVER-PERIOD CHANGES - HISTORICAL YEARS, NUCLEAR

- 5 **2015 Actual versus 2015 OEB Approved (\$32.9M versus \$26.8M)**
- 6 Actual asset service fees for nuclear increased by \$6.1M versus the 2015 Board approved
- 7 amount due to higher than planned depreciation expense and tax-adjusted return as a result
- 8 of the implementation of the Enterprise System Consolidation Program.

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- 10 **2015** Actual versus 2014 Actual (\$32.9M versus \$23.3M)
- 11 Actual asset service fees for nuclear increased by \$9.6M compared to 2014 actual costs due
- 12 to higher than planned depreciation expense and tax-adjusted return as a result of the
- implementation of the Enterprise System Consolidation Program.

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- 15 **2014 Actual versus 2014 OEB Approved (\$23.3M versus \$23.3M)**
- 16 No change.

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- 18 **2014 Actual versus 2013 Actual (\$23.3M versus \$22.7M)**
- 19 Asset Service fees are relatively stable from 2013 to 2014.

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- 21 **2013** Actual versus **2013** Budget (\$22.7M versus \$22.7M)
- 22 No change.

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Schedule 2 Table 1

Table 1

<u>Comparison of Asset Service Fees - Regulated Hydroelectric (\$M)</u>

Intentionally left blank (See Ex. A1-3-1)

Numbers may not add due to rounding.

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Exhibit F3
Tab 2

Schedule 2

Table 2

Table 2
Comparison of Asset Service Fees - Nuclear (\$M)

Line		2013	(c)-(a)	2013	(g)-(c)	2014	(g)-(e)	2014	(k)-(g)	2015	(k)-(i)	2015
No.	Business Unit	Budget	Change	Actual	Change	OEB Approved	Change	Actual	Change	OEB Approved	Change	Actual
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1	Nuclear	22.7	0.0	22.7	0.6	23.3	0.0	23.3	9.6	26.8	6.1	32.9

Line		2014	(c)-(a)	2016	(e)-(c)	2017	(g)-(e)	2018	(i)-(g)	2019	(k)-(i)	2020
No.	Business Unit	Actual	Change	Budget	Change	Plan	Change	Plan	Change	Plan	Change	Plan
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
2	Nuclear	32.9	(4.5)	28.4	(0.5)	27.9	0.0	27.9	0.4	28.3	(5.4)	22.9

Line		2020	(c)-(a)	2021
No.	Business Unit	Plan	Change	Plan
		(a)	(b)	(c)
3	Nuclear	22.9	(2.2)	20.7

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OPG PROCUREMENT PROCESS

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1.0 PURPOSE

4 This evidence provides an overview of OPG's procurement process. It provides support for

5 the OM&A purchased services information presented for nuclear (Ex. F2-6-1) and support

6 services (Ex. F3-3-2).

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2.0 OVERVIEW OF PROCUREMENT PROCESS

OPG's procurement process is the same as presented in the last proceeding and is conducted as follows¹: The need for a service or item is identified and a requisition is created and approved by the appropriate authority as per OPG's Organizational Authority Register ("OAR").

- If no existing agreement is in place that can satisfy the need for the service or item, Supply Chain, in consultation with the requisitioner, seeks quotations² or proposals³ using the following methods:
 - Invitational Competitive Process this process uses the request for quotation or request for proposal ("RFQ/RFP") process as applicable. For the procurement of goods and services (both consulting and non-consulting), a request to submit a written quotation/proposal in response to OPG requirements is made to qualified suppliers.
 - Open Competitive Process this process involves posting procurement documents using an approved OPG electronic proposal system. All consulting contracts with a procurement value greater than or equal to \$100k must be conducted through the open competitive process.

¹ This process applies to the acquisition of services or items above a threshold value of \$10k. Below this threshold value, purchasing authority is delegated to the businesses through the use of a purchasing card or local purchasing authority (purchase order-based transactions).

² A request for quotation ("RFQ") is a request for price and availability of items/services based on specified technical, quality, and commercial requirements where the value is estimated up to \$100k.

³ A request for proposal ("RFP") is a formal request for price and availability of an item and/or service based on specified technical quality and commercial requirements where the value is estimated to be greater than \$100k.

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- Single/Sole Source Process exceptions to a competitive procurement process are allowed under certain allowable circumstances. Exceptions must be justified and prior approval from the appropriate purchasing authority (according to the OAR) must be granted when a single/sole source strategy is used.
 - OPG's RFQ/RFP process requires that the evaluation criteria and weightings be established by Supply Chain and the requisitioner/project manager in advance of issuing the RFQ/RFP. The criteria, weightings and evaluation methodology (the process used to assess, evaluate and score supplier proposal) are fully disclosed to proponents in the RFQ/RFP and typically include the following:
- 0 Mandatory requirements, which are criteria that are assessed on a pass/fail basis.
 - Rated requirements, which include all weights and sub-weights and a description of any short-listing processes including any minimum rated score requirements and the role and weighting, if applicable, of reference checks, oral interviews, demonstrations and site visits.
 - Price/cost and a description of the evaluation methodology that may include the use of scenarios to determine cost for specific volumes and service levels. The evaluation of price/cost is only completed if mandatory and minimum rated requirements are met.
- For services performed on OPG premises, potential suppliers are pre-qualified with respect to safety performance.
 - To ensure the integrity of the procurement process, Supply Chain acts as the single point of contact with potential suppliers until the evaluation of proposals or quotations is complete and a supplier has been selected. Initial purchase price is part of the total lifecycle cost criteria used in evaluating proposals or quotations; however, when more of the lifecycle cost of an item or service is known, the additional lifecycle cost elements are included and evaluated through the process. Additionally, the relative weighting of the selection criteria varies and there may be instances when the lowest initial purchase price supplier is not selected.
 - Negotiation and finalization of the purchase order and/or agreement terms is led by Supply Chain with support from other internal subject matter experts along with the requisitioner as required. An agreement and/or purchase order is issued once Supply

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Chain receives a requisition approved by the appropriate OAR authority. In some areas, master agreements have been developed with certain suppliers to shorten the procurement time for services and items through pre-negotiated terms, conditions and rates. In other areas, OPG has established master agreements with more than one supplier for the same type of item or service under similar terms and conditions. This creates a secondary competitive environment where the suppliers under the master agreement competitively bid on each work package, thus ensuring OPG receives the best value. Under such master agreements with more than one supplier there may be instances where Direct Award may be executed with documented allowable exemptions.

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- Once the supplier is awarded business, depending on the complexity and financial implications, an OPG contract administrator may be assigned to monitor the contract to ensure the supplier meets all contractual obligations, confirm receipt of the item or service, and approve submitted invoices for payment. The performance of the supplier is assessed by the contract administrator and Supply Chain can utilize this assessment when selecting proponents for future work.
- The requisitioner notifies Supply Chain once the contract requirements are complete and final payment has been made. The purchase order is subsequently closed out by Supply Chain.

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OM&A PURCHASED SERVICES - SUPPORT SERVICES

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1.0 PURPOSE

- 4 This evidence presents the purchases of OM&A services and products by Support Services
- 5 that meet the threshold in the OEB filing guidelines of 1 per cent of the total OM&A expense
- 6 before taxes.

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8 **2.0 OVERVIEW**

- 9 An overview of OPG's procurement process is presented in Ex. F3-3-1. For Support
- Services, the threshold of 1 per cent of total OM&A expense before taxes is approximately
- 11 \$6M in 2013, 2014, and 2015.

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- 13 Information on vendor contracts for OM&A purchased services by the Support Services for
- 2013, 2014 and 2015 is presented in Chart 1. The information presented represents the total
- value of these contracts for Support Services groups, and not an allocation to the regulated
- 16 facilities.

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1 Chart 1
2 Purchased Services – Support Services OM&A Contracts

Vendor Name	Description/ Nature of Activities	Procureme	ent Process
		Competitive	Single Source
New Horizons System Solution	Provide OPG with information technology services as specified in Ex. F3-1-1.	√	✓
		Until October 1, 2009	Leveraged renegotiation after October 1, 2009
ARI Financial Services Inc	Transport and work equipment leasing	√	

- 4 Total 2013 spend = \$104M
- 5 Total 2014 spend = \$96M
- 6 Total 2015 spend = \$97M