ALLOCATED OF CORPORATE COSTS

1.0 PURPOSE

The purpose of this evidence is to describe the corporate support costs assigned and allocated to the nuclear and the regulated hydroelectric business units, as well as the underpinning cost allocation methodology. This evidence also responds to the OEB’s direction in EB-2007-0905 to conduct an independent review of the cost allocation methodology and to consider the OEB’s “3-prong test” in that review.

2.0 OVERVIEW

OPG is seeking approval of a revenue requirement for the regulated hydroelectric and nuclear business units that includes the costs assigned and allocated to them from OPG’s corporate support groups. The revenue requirement for the regulated hydroelectric business unit includes $24.8M and $26.3M of assigned and allocated corporate costs in 2011 and 2012 respectively, as presented in Ex. F3-T1-S1 Table 2. The revenue requirement for the nuclear business unit includes $249.2M and $252.3M of assigned and allocated corporate costs in 2011 and 2012 respectively, as presented in Ex. F3-T1-S1 Table 3.

The overall level of corporate support costs allocated to the regulated business units remains stable over the bridge year and test period.

In order to assign corporate support costs to the nuclear and regulated hydroelectric business units, OPG has developed a robust cost allocation methodology. This model was independently reviewed by Black & Veatch Corporation (“Black & Veatch”), and approved during EB-2007-0905. OPG has used essentially the same cost allocation methodology as that approved in EB-2007-0905 to determine the cost allocations reported in this exhibit.

OPG is structured such that certain corporate groups provide services and incur costs in support of the nuclear and regulated hydroelectric business units. Corporate support
groups include Business Services and Information Technology ("BS&IT"), Finance, Human Resources, Corporate Affairs, Executive Office, Corporate Secretary, Law, and Corporate Business Development. A description of the corporate groups is provided in section 3.

The budgets for OPG’s corporate groups are established through the corporate business planning process as set out in Ex. A2-T2-S1. OPG benchmarks the costs of its largest corporate functions, specifically, Information Technology, Finance and Human Resources, as a tool to support its annual business planning process and to help establish performance targets. The corporate groups that are benchmarked account for approximately 70 per cent of the corporate costs assigned and allocated to the regulated facilities. The results of corporate function benchmarking are provided in section 3.

In OPG’s cost allocation methodology (section 4.0), corporate support group costs are either directly assigned or allocated to the regulated business units. For the test period, approximately 53 per cent of the assigned and allocated costs are directly assigned. OPG directly assigns costs that are directly related to a business unit. For example, corporate support employees working at, and solely in support of, a business unit would be directly assigned to that business unit. Allocated costs are those costs that are used by more than one business unit. These costs are allocated based on appropriate cost drivers, which reflect cost causation or benefits received by the business unit. Approximately 68 per cent of OPG’s total corporate function costs are assigned or allocated to the regulated operations based on the cost allocation methodology. This proportion represents approximately 13 per cent of total combined OM&A costs of the regulated hydroelectric and nuclear business units.

In the EB-2007-0905 Decision with Reasons (page 60), the OEB directed OPG to undertake an independent evaluation of its corporate cost allocation, including consideration of the OEB’s “3-prong test.” OPG’s corporate cost allocation has been reviewed including compliance with the “3-prong test” by independent cost allocation experts, Black & Veatch. Black & Veatch concluded that the methodology to assign and
allocate costs meets best practices and is consistent with cost allocation precedents established by the OEB and that the allocated costs meet the requirements of the OEB’s “3-prong test”. The Black & Veatch study is presented in Ex. F5-T2-S1.

In addition to considering the allocation methodology for assigning and allocating corporate support costs, Black & Veatch also reviewed and endorsed OPG’s methodology for allocating common hydroelectric business unit costs between its regulated and unregulated hydroelectric operations. These costs are described in Ex. F1-T2-S1.

3.0 CORPORATE COSTS – TOTAL OM&A

Exhibit F3-T1-S1 Table 1 summarizes OPG’s total corporate support OM&A before direct assignment and allocation to the nuclear and regulated hydroelectric business units. Fluctuations in these costs over the period 2007 - 2012 are discussed below, followed by a description of the services provided by the groups.

Corporate support cost increases over the 2007 - 2010 period are mainly due to increases in costs in the Corporate Centre, Finance, Human Resources and Corporate Affairs, partially offset by a decrease in costs within the Information Technology group. Increases to OM&A costs are due to increases in: controllership to support the nuclear business unit, internal audit programs, leadership development initiatives, OEB costs, and initiatives related to water safety, community and sponsorship advertising as well as economic increases during the period. Information Technology cost reductions during the period are achieved through a decrease in the need for new technology as a result of improved demand management, leveraging existing applications, increased standardization and simplification of the information technology environment. Further efficiency gains in Information Technology are planned as a result of process re-engineering and the renegotiation of hardware commodity contracts. Information Technology has also successfully renegotiated the contract with OPG’s service provider to obtain substantial year-over-year productivity improvements which are being used to offset normal cost pressures between 2010 and 2012.
Costs during the 2010 - 2012 period remain constant except for an increase in 2012 due
to a 53-week fiscal calendar as compared to a 52-week calendar in 2010 and 2011.
Economic increases over the 2010 - 2012 period are offset by various cost reduction
initiatives in the corporate support groups, consistent with the business planning
guidelines as discussed in Ex. A2-T2-S1.

Exhibit F3-T1-S1 Tables 2 and 3 present the corporate support costs allocated to
nuclear and regulated hydroelectric over the historical, bridge, and test years.

3.1 Finance
Finance provides strategic advice, services, and support in the areas of controllership,
financial services, treasury, insurance, risk services, business and investment planning
and internal audit.

Financial Services
Financial Services performs external reporting, accounting, International Financial
Reporting Standards (“IFRS”) conversion, internal control and compliance, regulatory
finance, and financial processing services such as accounts receivable, accounts
payable, and fixed assets transactions management.

Risk Services
Risk Services includes operational risk management, market risk management, and
credit risk management. The services performed by these groups include: assessing the
effectiveness of OPG’s network of risk management, control, and governance
processes; providing risk management consulting services to the businesses; providing
independent assurance that market risk exposures are appropriately managed; and
assuring that OPG’s credit risk is appropriately managed.
Internal Audit

Internal Audit provides independent, objective assurance of the organization’s operations, maintains a 24-month rolling strategic audit plan which includes key risk audits, mandatory audits, cyclical audits, major project audits, contract audits and other audits and reviews.

Controllership

Controllership provides accounting, reporting, budgeting, and financial advice and guidance to the business units. There are specific departments dedicated to nuclear and hydroelectric stations and their costs are directly assigned to these business units. As well, other controllership departments provide support to all OPG business units and their costs are allocated based on OPG’s allocation model. Controllership also prepares income tax returns and provides advice in income and commodity tax matters.

Business and Investment Planning

Business and Investment Planning provides corporate level planning, evaluations and property tax services. Business Planning’s responsibilities include business planning guidance and strategy, financial planning, forecasting and reporting, and financial strategy and performance management. Investment Planning performs financial evaluations of major investment initiatives and provides tools and programs to assist business units in their own evaluations.

Treasury

Treasury is responsible for the management of cash, financial exposure, capital structure, the Ontario Nuclear Funds Agreement funds, administration of the insurance program and oversight for OPG pension funds.

Exhibit F3-T1-S1 Tables 4 and 5 summarize Finance costs allocated to nuclear and regulated hydroelectric over the historical, bridge and test years.
Finance Benchmarking

Finance participated in a benchmarking exercise undertaken by the Hackett Group in 2007. This was followed by a mini benchmarking exercise – the “Benchmark Progress Report – Finance” in 2009, that was based on 2008 data. The purpose of the 2009 report was to assess performance related to resource allocation. Hackett has prepared a report comparing OPG’s FTE, cost and transaction data to the median value of a peer group of 11 energy companies considered to have similar demographics and complexity as OPG (see Ex. F5-T3-S2).

The benchmarking progress report shows that for total costs, Finance scored in the 2nd quartile of its peer group on total finance costs as a percent of total revenue (before rebates). As well, when total finance costs are considered against revenue (after rebates), Finance’s cost as a percent of revenue has declined from 0.84% in 2006 to 0.81% in 2008. Total FTE’s have been reduced slightly from 240.7 in 2006 to 237.4 in 2008. FTE’s per billion of revenue is slightly higher than the median for the peer group at 38.0 vs. 35.5 for the peer group.

Of Finance’s total resources, 40% (38% in 2006) are assigned to Transactional Processing which includes Cash Disbursements and General Accounting and Reporting. In 2008, OPG was slightly lower (at 5.2 FTEs) than its peer group (at 5.7 FTEs) on the number of FTEs processing transactions for cash disbursements per billion of revenue but opportunities exist in reducing the cost per transaction. OPG’s rate for General Accounting and Reporting is 10.7 FTEs per billion of revenue and its peer group’s median is 10.0 FTEs per billion of revenue.

OPG also scored well against its peer group for Tax Management. OPG’s rate for Tax Management is below the 2008 peer group median: 1.8 FTEs per billion of revenue for OPG vs. 2.8 FTEs per billion of revenue for the peer group.

Finance has reviewed all the observations and findings from both benchmarking exercises and is formalizing an action plan to address the gaps. For example, OPG
addressed findings from the 2006 study related to automation and successes were
achieved in automating and standardizing both internal and external reporting resulting
in efficiency gains in 2009. Areas of focus for 2010 and 2011 include ongoing
standardized reporting, business planning, forecasting and budgeting.

3.2 Corporate Affairs
Corporate Affairs includes Energy Markets, Regulatory Affairs and Corporate Strategy,
Public Affairs, Environmental Affairs, Sustainable Development, and Emergency
Management and Business Continuity.

Energy Markets
Energy Markets coordinates the offering of OPG’s regulated facilities into the IESO
market. This includes outage planning and strategies to optimize production based on
market price signals, and to manage generation risks. Energy Markets is also
responsible for providing analysis on regulatory issues, responding to proposed market
rule changes, compliance and market monitoring, energy revenue planning and
forecasting, and emergency preparedness.

The regulated facilities benefit from this group as its services are necessary to offer
energy into the IESO market, to meet regulatory and operating limits, to meet reporting
commitments, and to arrange confirmation of timing of planned outages with the IESO,
while operating efficiently and effectively.

Regulatory Affairs and Corporate Strategy
Regulatory Affairs and Corporate Strategy Division (“RA&CSD”) is responsible for OPG’s
interactions with economic regulators. These include the OEB, IESO, the National
Energy Board and other Canadian and U.S. regulators that play an important role in
OPG’s operations. RA&CSD provides regulatory intelligence, strategy, and advice and
also manages regulatory interactions to obtain approvals and outcomes that allow OPG
to accomplish its business goals.
Specific activities include:

- Leading OPG’s preparation of the OEB payment amount application.
- Managing OPG’s participation in regulatory proceedings and consultations in Ontario and other Canadian and U.S. jurisdictions.
- Coordinating the development of OPG’s positions on market issues and advancing these issues through the IESO’s stakeholding processes.
- Providing regulatory and strategic support, research, and advice within OPG to facilitate OPG’s participation in the electricity industry and to support strategic decisions.
- Obtaining and maintaining all necessary regulatory approvals for OPG to participate in the Ontario electricity market and other markets as required.

Public Affairs

Vice President, Public Affairs
The Vice President, Public Affairs supports the regulated businesses by directing the planning and delivery of communications and issue management advice, guidance and services to support the business unit’s ongoing efforts to earn and maintain the public franchise to operate regulated facilities in Ontario. This includes the development of communications and issue management strategies to improve OPG’s relations with (Nuclear and Hydroelectric) host communities, and further their understanding of the company as a safe, reliable, environmentally responsible operator and steward of the Province’s generating assets.

Nuclear Public Affairs
Nuclear Public Affairs oversees accountability for OPG’s reputation in the nuclear host communities. As well, it is accountable for meeting federal regulator expectations for transparent communication, reporting and outreach within the host community, with key stakeholders, interest groups and the public as well as employees. Nuclear Public Affairs has direct accountabilities for emergency preparedness communications within the host communities and in cooperation with the Corporate Public Affairs group. Nuclear Public Affairs also plays a key role in the nuclear station operations through communication
support for driving employee alignment and understanding of the nuclear work program through internal communications. Nuclear Public Affairs provides site Public Affairs staff to execute the external and internal employee communications programs.

Hydroelectric Public Affairs
Hydroelectric Public Affairs provides services to OPG’s regulated hydroelectric facilities including:

- Issue management: communication strategies for maintenance work that could impact the local community, communications regarding legal and property issues, strategies for local government relations, water use issues and development and execution of a public safety awareness campaign to inform the public that hydroelectric dams and stations are not safe places for recreation.
- Support for emergency preparedness initiatives.
- Development for local outreach programs that support community projects including community environment and educational initiatives.
- Employee communications: work with Human Resources and the business unit to develop select employee communications (e.g., safety milestone communications, communications of accomplishments to improve employee engagement).
- First Nation Relations: develop communication materials, event planning, and media relations coordination.

Corporate Public Affairs
Corporate Public Affairs in consultation with Hydroelectric and Nuclear Public Affairs supports OPG’s regulated business units by managing Internet communications through OPG.com; developing executive speeches and presentations; creating internal employee communications (both intranet management and Power News [staff newsletter]); developing materials and logistics for key announcements/events; preparing Performance Reports and Annual Reports; synthesizing qualitative and quantitative research; managing OPG’s Corporate Citizenship Program; and managing print and electronic advertising (e.g., Water Safety campaign for hydroelectric facilities).
Media Relations

Media Relations supports OPG’s regulated business units by acting as the prime corporate spokesperson and contact point for media; analyzing media coverage and prepare issues responses; providing assistance for government and stakeholder relations; developing OPG’s emergency communications response; coaching OPG spokespersons as required, which includes preparation of communications plans and briefing notes; providing complementary media support to OPG’s safety and community programs.

3.3 Business Services and Information Technology

Business Services and Information Technology (“BS&IT”) manages the following functions: Information Technology, Real Estate and Services, and Corporate Supply Chain.

Information Technology (“IT”)

The IT group oversees OPG’s information management and information technology needs. IT is accountable for the strategic planning, management and operations of all business and technical information systems, but excludes support of process computers that control plant systems and operations. IT also administers OPG’s information management and governing documents framework.

IT services are provided through a combination of internal staff and an outsource service contract with New Horizon System Solutions (“NHSS”), owned by Capgemini. New Horizon System Solutions provides the delivery of IT application and infrastructure management services for corporate and nuclear systems while internal IT staff provide applications management services to Energy Markets due to the commercially sensitive nature of the applications, as well as specific infrastructure and applications management services to staff at the regulated hydroelectric sites. The infrastructure management services include desk-side support, helpdesk/call centre, e-mail, Internet, remote access, disaster recovery, IT security network (LAN/WAN) and data centre operations. Application management services includes maintenance and development.
support for enterprise and custom applications (see Attachment 1 section 3 for detail of IT services).

In 2009, OPG completed a leveraged renegotiation of its outsourcing agreement with NHSS. The key objectives of the renegotiation were further reductions in the ongoing costs of IT services and the implementation of a market-based pricing structure that will provide opportunities for further costs reductions as OPG’s business needs change. The annual savings targets were achieved during the renegotiation and compared to the previous agreement, OPG expects to save about $100M by the end of the five-year extension included in the new agreement. A summary of the outsourcing agreement between OPG and New Horizon System Solutions is included in Attachment 1.

Information Technology established a 5-Year IT Strategy in 2008 to optimize the delivery of its assets and services. Based on the strategy and the results of external benchmarks, IT has defined an aggressive plan to reverse the trend of year-over-year cost escalation due to economic increases, increased usage and introduction of new assets. IT is targeting to maintain its OM&A costs at a constant level between 2010 and 2012. This will be achieved through increased demand management, service optimization, application rationalization, and negotiated savings in outsourced services.

Exhibit F3-T1-S1 Tables 6 and 7 present the BS&IT group’s costs allocated to nuclear and regulated hydroelectric over the historical, bridge, and test years. The costs related to the New Horizon services include: Infrastructure Management, Application Maintenance, Data Centre Services, and Other Services and are explained in more detail below.

The Infrastructure Management costs identified in the tables refer to the volume-based costs of New Horizon 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.
Application Maintenance costs cover the New Horizon services focused on providing
day-to-day support for OPG’s portfolio of business applications including: application
maintenance and support, applications operations and monitoring, application upgrades,
database and middleware support. IT also work closely with the application owners to
plan for patches and technical upgrades, life cycle planning, release management,
testing and commissioning and overall demand management.

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

The Other Services referred to in the tables include New Horizon 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), Energy Market Systems operations, monitoring and support and IT
Procurement Services.

The IT Support Costs identified in the tables refers 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.

Real Estate and Services
The Real Estate and Services group provides centralized support services through four
departments: Real Estate Services, Facility and Project Services, Business Services,
and Fleet Services.

OM&A costs are tightly controlled through service area expertise, demand management,
effective space and service utilization, economies of scale (as a centralized service
provider), outsourcing (to the extent permitted under collective agreements), competitive
procurement and staff reductions.
Real Estate Services

On a corporate-wide basis, Real Estate Services acquires, manages and disposes of real estate rights and interests; manages real estate data, consults on municipal planning issues; and develops and implements accommodation strategies to meet space requirements outside the generating stations.

For nuclear, Real Estate Services manages all commercial leases within the Region of Durham as well as various licenses and other real estate rights; incurs rent for major long-term leased facilities (currently 889 Brock, 777 Brock, 2255 Forbes and 1549 Victoria) as well as the cost of utilities for the OPG-owned Pickering Learning Centre; and develops and implements accommodation strategies.

For hydroelectric, Real Estate Services manages all real estate rights and interests (including water power leases, commercial leases, flooding easements and waterfront licenses); and provides and manages real estate data and property documents.

Facility and Project Services

Facility and Project Services provides property management services, space planning, move co-ordination, office furniture and facility project management services. In addition, emergency response services are provided for all facilities under its control, along with generating station support as requested.

For Nuclear, Facility and Project Services supports facilities outside the generating stations including all such facilities located in Durham Region as well as space occupied at 700 University Avenue, 800 Kipling Avenue and Wesleyville, and certain facilities at the Bruce site.

For hydroelectric, Facilities and Projects supports its space at 700 University Avenue.

Business Services

Business Services provides administrative infrastructure support, information processing and storage and general process support. Business Services also provides corporate-
wide services such as graphics, audio/visual, printing, as well as records management, document processing, office equipment, office supplies and process support for staff located at 700 University Avenue as well as Nuclear Programs and Training, and Inspection and Maintenance Services staff located at certain facilities in Durham Region.

**Fleet Services**

Fleet Services provides corporate-wide fleet administration services including technical advice, acquisition/redeployment, fleet leasing program, fleet credit card program, licensing and insurance and processing of operating costs.

In addition to the OM&A costs to support these services, OM&A costs of managing common real estate assets held centrally (e.g., OPG Head Office) are within Real Estate. The generation business units are charged an asset service fee related to the use of these centrally held assets (Ex. F3-T2-S1).

Exhibit F3-T1-S1 Tables 6 and 7 summarize Real Estate costs allocated to nuclear and regulated hydroelectric over the historical, bridge, and test years.

**Corporate Supply Chain**

The Corporate Supply Chain ("CSC") group is responsible for procuring services and materials and managing contracts for OPG’s Corporate support groups (e.g., Human Resources, IT, Real Estate, Finance, etc.). Corporate Supply Chain focuses on maintaining integrity in the procurement process, delivering value for money and protecting OPG and its assets. Corporate Supply Chain has OPG-wide accountability for creating Supply Chain governance and performance reporting, maintaining the OPG-wide Contractor Management Program and coordination of Supply Chain-wide initiatives.

There are three departments in CSC: IT Procurement, Corporate Procurement and Supply Chain Services.
• IT Procurement group is responsible for developing and executing IT sourcing strategies in support of the IT group. IT Procurement also carries out contract management of OPG’s IT outsourcing agreement.

• Corporate Procurement group is responsible for developing and executing on sourcing strategies to support the corporate groups.

• Supply Chain Services group is responsible for OPG-wide Supply Chain governance and performance reporting, the Contractor Management Program and coordination of Supply Chain-wide initiatives.

Exhibit F3-T1-S1 Tables 6 and 7 summarizes Corporate Supply Chain costs allocated to nuclear and regulated hydroelectric over the historical, bridge, and test years.

Information Technology ("IT") Benchmarking

IT benchmarking is conducted with the goal of providing data to support the IT business in driving continuous improvement and the adoption of industry leading practices. IT has been benchmarking itself since 2005 in order to understand its spending and staffing profiles within the context of the electric utility industry and to measure its progress towards becoming a top quartile performer. In 2008, IT developed a 5-Year IT Strategy based on evolving business requirements, technology trends and industry benchmarks. The strategy provides a clear vision of the required future state and a comprehensive road map to achieve top quartile IT cost and service performance while increasing IT value contribution to the business and improving IT staff engagement.

IT uses the benchmarking data services of Electric Utility Cost Group ("EUCG"), a non-profit association with membership from North American and international utilities. The EUCG was selected as its peer group is comprised solely of electric utilities; thereby offering the best comparison to OPG’s operations. However, it should be noted that the majority of the members in the EUCG peer group are integrated (generation,
transmission, distribution, retail) utilities where administration costs are allocated among
the integrated businesses.

EUCG data was used by IT to compare OPG against ten North American electric
generation utilities’ IT spending per employee and IT spending per GWh. The results for
the two metrics are as follows:

2008 EUCG Comparator Group Data

<table>
<thead>
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<th>Metric</th>
<th>OPG</th>
<th>Q1</th>
<th>Median</th>
<th>Q2</th>
<th>Q3</th>
<th>Average</th>
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<td>IT Spending (k$/Employee)</td>
<td>$11.8</td>
<td>&lt; $9.7</td>
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<tr>
<td>IT Spending (k$/GWh)</td>
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<td>&lt; $1.6</td>
<td>&lt; $2.5</td>
<td>$2.3</td>
<td></td>
</tr>
</tbody>
</table>

The results indicate that OPG’s IT costs in 2008 were within the second quartile for IT
spending per employee and at the median for IT spending per GWh. While these results
put OPG in a median position for 2008, there is a general recognition among the peer
group of utilities that there is continuing pressure to further reduce IT costs. The IT group
used the benchmark results as an input into the development of the IT Strategy and
business plan. As part of the strategy and business plan it has committed to a significant
reduction in IT spending in the 2010 plan over previous plans in order to sustain its
position within the peer group. OPG’s position within the peer group on the two metrics
is presented in the following graphs:
2008 IT Spend/Employee – OPG shown in Red.

2008 IT Spend/GWh - OPG shown in Red.
3.4 Corporate Centre

The corporate centre includes the Executive Office (Chairman, President and CEO offices), the Corporate Secretary function, Law, and Corporate Business Development. The Executive Office is responsible for the overall management and strategy for the company. The Corporate Secretary function supports the Board of Directors ("the OPG Board") and the Executive Offices, and interfaces between the OPG Board, management and OPG's shareholder.

Law

Law provides legal advice and services to support all business units across OPG, including:

- Support for procurement activities for materials, fuel, equipment and services, information technology, corporate governance, and finance.
- Support for all corporate and commercial matters related to all business units and advice related to OPG's pension and nuclear funds.
- Advice on real estate, energy markets, Bruce lease and related agreements, and water resources.
- Advice on energy regulatory matters, including the OEB payment amount application, environmental approvals and compliance, nuclear licensing, litigation, municipal approvals and land use planning, First Nations issues, freedom of information request, and occupational health and safety compliance.
- Advice and services in the areas of labour, employment and privacy law.

Law costs are directly assigned to the business units they support through estimates of percentage of time spent in support of these business units.

Executive Office and Corporate Secretary

The costs of the Executive Office and Corporate Secretary are allocated to the business units by applying the appropriate cost drivers. All Executive Office and Corporate Secretary costs are allocated based on a blend of costs for OM&A and capital expenditures.
Corporate Business Development

Corporate Business Development is responsible for developing and maintaining 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.
- Develop and implement external and internal partnership in support of the corporate strategy.

Corporate Business Development’s costs are not allocated or assigned to the regulated facilities.

3.5 Human Resources

Human Resources supports the organization in effectively managing and developing a highly skilled workforce to achieve its goals and objectives. It provides strategic advice, services and support in the areas of: talent management and staffing, human resource planning and reporting, labour relations, employee safety and wellness, compensation and benefits, ethics and code of business conduct, payroll services and generalist human resources services in the field. There are generalist human resources departments dedicated to the nuclear, thermal, hydroelectric and corporate business units, as well as specialist human resources departments that serve all of OPG.

Benchmarking of the human resources function is presented below.

Safety, Wellness and Total Compensation

The group is responsible for developing compensation and benefits policy, strategy and programs including base pay, performance based incentives, benefit programs, pension programs.
In addition, the Safety, Wellness and Total Compensation group is responsible for corporate safety and employee wellness strategy and services, payroll administration, and HR policies and reporting.

Site (Nuclear and Regulated Hydroelectric) Human Resources and Employee Safety
These staff provide services at the production facilities. Site Human Resources provides human resources and employee safety strategy, services, advice, programming, and governance in support of the business units. Support is provided in areas such as time entry systems and processes, talent management, compensation and benefits, collective agreement administration, dispute resolution, employee engagement, safety, wellness, absent/injured worker management, succession planning, performance management, leadership effectiveness, and human resources administration.

As well, Site Human Resources includes an employee safety function which assists the corporation in fulfilling their requirements as outlined in the Occupational Health and Safety Act of Ontario.

Labour Relations
Labour Relations provides strategic advice on issues related to collective bargaining and grievance management. It is responsible for the administration of the collective agreements for Power Workers Union (“PWU”), Society and Building Trade Unions (“BTU”). Approximately 90 per cent of OPG’s workforce is unionized. There are approximately 7,500 PWU and 3,500 Society staff at OPG. BTU staff numbers vary based on the projects that are being carried out at OPG.

Corporate HR and Employee Safety
Corporate HR and Employee Safety is responsible for providing generalist functions and services to the corporate function groups and is the specialist area responsible for organization development activities. They are responsible for long-range planning and the development and support of employee development and talent management programs to support business strategies and ensure the supply and development of
employees across the organization. The department supports this service by providing
senior leadership to executive recruiting and succession planning activities.

Senior Vice-President
The Senior Vice President’s office holds the budget for all human resources consultants
and purchased services requirements.

Exhibit F3-T1-S1 Tables 8 and 9 summarize human resources costs allocated to nuclear
and regulated hydroelectric over the historical, bridge, and test years.

Human Resources Benchmarking
OPG participates in a benchmarking group called the Electric Utility HR Metrics Group
(“EU-HRMG”). This group benchmarks performance on a cross-section of human
resources (“HR”) metrics annually with data reported from each participating utility. The
data uses a consistent definition of HR functions that are benchmarked across 40
member utilities. The data excludes HR functions such as wellness, safety, and payroll.
ScottMadden Management Consultants has prepared a summary report (see Ex. F5-T3-
S1) of the HR benchmarking analysis and a summary of the results. The ScottMadden
HR report concludes that OPG’s HR function:
• Makes efforts to effectively benchmark and actively leverages its benchmarking
  results to improve the HR function.
• Is better than peer group median on spending per HR FTE (“full time equivalent”) to
deliver a comparable set of HR services and at median on investment per employee
in HR programs.
• Shows a positive trend for reducing HR expenses as a per cent of operating
  expenses over the last five years as opposed to the growth in relative HR expenses
shown by the peer group over the same period.
• Has decreased HR expenses per employee and shown improvement in the cost of
delivering HR services to employees over the five year period.
• Has lower overall hiring costs due to better retention rates for new hires and lower
overall separation rates for the company as a whole.
• Has lower overhead costs relating to OPG’s management span of control which is the broadest among the peer group.

• Provides HR support at an average or lower cost than the peer group companies, even with HR staff ratios that are lower than most of the peers.

In addition to sustaining the areas of positive performance, HR will focus on improving HR processes and refining the HR service delivery model to optimize efficiencies and increase effectiveness. Performance targets have been incorporated into business planning and the HR scorecard to drive improvements in the hiring cycle process and the HR FTE/employee ratio.

4.0 METHODS OF ALLOCATION

OPG’s allocation methodology was independently evaluated by Black & Veatch and approved by the OEB as part of EB-2007-0905. The model uses two methods to distribute shared costs among the business units: direct assignment and allocation.

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

4.2 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, the Accounts Payable
Department’s costs are allocated to business units based on the number of transactions processed for each group. 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.

OPG used three steps when allocating a department’s costs:
• Step One – Specific Identification of Resources.
  o The costs of resources specifically identified to a business unit are assigned to it.
  o Labour: Identifying individuals who support only one business unit.
  o Non-labour: Identifying costs directly caused by one business unit.

• Step Two – Estimation of Resources
The next step is to identify the resources in each department that directly support one or more business units 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
Where no direct relationship exists, a cost driver is assigned to each type of expense. Similar activities have similar or standardized cost drivers. Black & Veatch has recommended standardized cost drivers and OPG has adopted these recommendations. A list of cost drivers used by each business unit is provided in Exhibit B of the Black & Veatch Report (see Ex. F5-T2-S1).

OPG department managers and the business units were consulted and supporting analyses were prepared to support the specific identification/direct assignment, and in selecting cost drivers which improves the quality of the cost allocation process. The department managers are in the best position to determine how resources are used.
5.0 COST ALLOCATION METHODOLOGY REVIEW

OPG retained Black & Veatch in 2009 to review and evaluate the cost allocation methodology used to assign and allocate corporate support costs to nuclear and regulated hydroelectric. The scope of the assignment also included a review to determine and document OPG’s compliance with the OEB’s “3-prong test”.

Black & Veatch’s findings on OPG’s cost allocation methodology as identified in its report are as follows:

- OPG’s cost allocation process has the support of senior levels of management.
- OPG’s cost allocation process uses the principles of direct assignment and cost drivers that are key components of current best practices and OEB precedents.
- OPG’s process relies on the judgement of departmental managers and business units to support specific identification and time estimates. These are the people in the best position to determine how resources are used.
- Supporting analyses were prepared by many of the central support and administrative costs groups and departments, including detailed analyses of activities, identification of specific resources, interviews to determine time estimates and reviews of invoices to determine historical usage.
- The business units to which the central support and administrative costs are distributed are familiar with the cost allocation process, confirmed where appropriate that specific resources are used by them and confirmed that the functions and services for which they are allocated costs are actually being received by them.

Summary of Conclusions by Black & Veatch

- The overall approach is appropriate for the business organization of OPG.
- Direct assignment of costs by specific identification and by estimation is based on sufficient information reasonably applied.
- Direct assignments are used wherever possible.
- The costs drivers selected by OPG for those instances where not all costs are directly assigned are appropriate.
The methodology used by OPG to distribute the corporate costs separates the costs between regulated and unregulated business units in a manner that meets current best practices and is consistent with cost allocation precedents established by the OEB.

Recommendations:

Black & Veatch has made the following recommendation in their 2010 report with respect to documentation:

We recommend that the documentation for the cost allocation models, which OPG has drafted, be completed and expanded to be more applicable to business users.

In response to this recommendation, OPG has initiated a review of the documentation including desktop procedures for business users. OPG expects to have the documentation prepared and finalized in 2010.

In the Black & Veatch 2006 Report a number of recommendations were made to improve OPG’s processes. Black & Veatch reviewed these recommendations and included the following in their 2010 Report.

Black & Veatch reviewed the recommendations made to OPG in their 2006 Report and found that they have been implemented, including improved documentation for the cost allocation methodology and process and separately assigning or allocating labour and non-labour costs.

5.1 Review of OPG’s Compliance with the 3-Prong Test

The Black & Veatch 2010 report includes an evaluation of OPG’s compliance with the 3-prong test (see Ex. F5-T2-S1) which is summarized as:

1. Cost incurrence: Were the corporate centre charges prudently incurred by, or on behalf of, the utility for the provision of services required by Ontario ratepayers?
2. Cost allocation: Were the corporate centre charges allocated appropriately to the recipient companies based on the application of cost drivers/allocation factors supported by principles of cost causality?

3. Cost / benefit: Did the benefits to the Company’s Ontario ratepayers equal or exceed the costs?

Conclusion on cost incurrence

Black & Veatch concluded that service providers tailor their offerings to meet the needs of the service recipients (Regulated Hydroelectric and Nuclear), and the levels of service they provide are adequate but not excessive. The centralized support and administrative costs were prudently incurred for the benefit of the service recipients, to enable them to meet the needs of the Ontario ratepayers they serve.

Conclusion on cost allocation

Black & Veatch reviewed the cost allocation methodology separately, as reported above. In addition the service recipients are familiar with the cost allocation methodology, and believe the cost allocations are appropriate and reflect differences in levels of service.

Conclusion on cost/benefit

Black & Veatch found that service providers explicitly consider the needs of the service recipients in developing their budgets, and often weigh explicitly the benefits and costs of activities they are considering. Benchmark studies indicate the major service providers are average or favourable to average performers.

Overall Conclusion on 3-Prong Test

Black & Veatch found that OPG’s allocated centralized support and administrative functions and service costs meet the requirements of the OEB’s 3-prong test. The responses to the questionnaires, including the interviews conducted by Black & Veatch as well as other information reviewed provide sufficient, reliable evidence on which to make this assessment.
A copy of the Black & Veatch Corporation Report is provided in Ex. F5-T2-S1.
6.0 SUMMARY OF COST DRIVERS USED IN COST ALLOCATION PROCESS

<table>
<thead>
<tr>
<th>Detailed Listing OPG Cost Drivers</th>
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<th>Allocated</th>
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<td>Regulatory Affairs</td>
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<td>Capital and OM&amp;A</td>
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<tr>
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<td>Specific and estimates</td>
<td>Capital and OM&amp;A</td>
</tr>
<tr>
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<td>Managed Contracts, telecom, hardware, miscellaneous</td>
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<td>FTE’s</td>
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LIST OF ATTACHMENTS

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3  Attachment 1: Summary of New Horizon System Solutions Outsourcing Agreement

4

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ATTACHMENT 1

Summary of New Horizon System Solutions Outsourcing Agreement

1.0 PURPOSE

The purpose of this evidence is to provide an overview of the structure and the key components of the New Horizon System Solutions ("NHSS") outsourcing agreement.

2.0 BACKGROUND

In 2009, OPG completed a leveraged renegotiation of its outsourcing agreement with NHSS. The key objectives of the renegotiation were further reductions in the on-going costs of IT services and the implementation of a market-based pricing structure that will provide opportunities for further cost reductions as OPG’s business needs change.

The leveraged renegotiation was the result of comprehensive preparation by OPG that began in early 2007 and is consistent with market best practices. The preparation included activities to evaluate strategic options, an independent assessment of those options, and several independent reviews to size the cost reduction opportunity and the conditions needed to realize that opportunity in order to establish appropriate cost savings targets. The preparations culminated in the approval of a business case recommending the levered renegotiation approach and savings targets of at least $10M annually to be sought in negotiations. The renegotiation approach offered the following benefits:

• Building on the existing outsourcing experience to arrive at service structures and pricing models more closely aligned to today’s marketplace
• Minimization of transition costs and risk
• Earlier on-going savings
• Greatest opportunity for success through joint solutioning with a motivated vendor (NHSS)
The annual savings targets were achieved during the renegotiation and compared to the previous agreement, OPG expects to save about $100M by the end of the five-year extension included in the new agreement. Afterwards, the strategy, its development, and its execution were independently assessed by Everest Group Canada and KPMG. Their assessments, conducted based on their market experience and research, found that

OPG was entirely consistent with leading practices in both the process to develop its End of Term Strategy ("ETS") and in the ETS itself, i.e. manner in which the strategy was executed.

3.0 SUMMARY OF SIGNIFICANT FEATURES OF THE CONTRACT

3.1 Service Components

Base Services

Base Services consists of internal and external labour costs, third party contracts, and some consumables incurred by NHSS in providing the following services:

- Data Centre Services
  Management of OPG’s mainframe, Unix and Wintel servers, storage and backup systems, capacity planning and performance tuning, systems operations and monitoring and IT facilities.

- Network Services
  Management of OPG’s Local Area Networks, Wide Area Networks, voice systems, firewalls, capacity planning, network performance optimization and network infrastructure upgrades.

- End User Services
  Management of OPG’s desktop environment, help desk support, remote access support, mobility services, printing and image management, software packaging and distribution service.

- Security and Disaster Recovery Services
  System access management, vulnerability management, IT security monitoring, intrusion management, investigations, disaster recovery planning and disaster recovery testing services.

- Application Maintenance
Day-to-day support for OPG’s portfolio of business applications including:
1. maintenance and support, operations and monitoring, upgrades, database and middleware support.

- **Service Management**
  Service Delivery and cross-tower Service Management support. Single point-of-contact with business users for all non-project related delivery matters. Responsible for overall quality of IT service delivery and attainment of service levels. Provides cross tower support in the areas of Incident, Major Incident, Problem, Change, Asset and Configuration, and Operational and Service Level Reporting.

- **Project Services**
  Project Services consists of IT application development or infrastructure improvement projects and may include the management and delivery responsibility for project services provided by of third parties. OPG is committed to purchase a specified minimum amount of Project Services in each contract year.

- **Procurement Services**
  New Horizon System Solutions procurement service will focus on tactical procurement for about 200 third party contracts covering vendors providing information technology commodities and services to OPG. For a limited number of the above contracts, NHSS provides vendor selection and contract negotiation services. These services are delivered in a manner consistent with OPG procurement policies and related governance.

- **Termination Services**
  In the event of contract termination, NHSS is obligated to provide the activities necessary to transfer services to another service provider, back to OPG, or both as the case may be. Termination services are billed at rates equal to the project rates in effect at the time.
3.2 PRICING

Pricing Structure

Pricing for base services is broken down into fixed and variable elements. The variable elements allow for price adjustments to reflect changes in volumes of services consumed. The overall price is set to decline over the term of the agreement for the volumes that exist at the start of the agreement.

Pricing for project services is broken down in three components: Project Delivery Services, Staff Augmentation Services, and Project Support Services. Project Services will be delivered under two different pricing structures: fixed fee, and time and materials. OPG is able to view the details of the estimate and has the option of a third-party audit of the individual estimates. The fees for time and materials projects will be based upon an agreed rate card.

Inflation Adjustments

All labour-related costs are adjusted annually according to the Toronto Consumer Price Index. For the base services, the annual increase is capped at 2 per cent.

4.0 COST SAVING INITIATIVES

Guaranteed Price Reduction

Effective October 1, 2009, the price to OPG for the initial set of base services was reduced to a level below OPG's previous price for those same services. On January 1 each year, commencing in 2010, the price for base services is further reduced, leading to an annual reduction of over $16M by 2015 for the same service level and volume. This price reduction is guaranteed to OPG based on the existing service volumes and levels.

Labour Inflation Protection

OPG’s exposure to labour cost inflation is capped through the contract term. Only the labour component of the price for services can be adjusted for inflation and that
adjustment is limited to Toronto CPI (Consumer Price Index) to a maximum of 2 per cent in the case base services.

Market Based Price Structure

The 2009 Information Technology Service Agreement contains a market-based price structure. The addition of a variable pricing model will provide OPG with additional cost reduction benefits as it adjusts its IT service requirements to match changing business needs over the term of the contact.

5.0 BENEFITS OF OUTSOURCING

The successful implementation of the information technology outsourcing has provided, and is expected to continue to provide, significant benefits to OPG as listed below:

- It allows OPG to focus on its core business which is the safe, efficient production of electricity.
- OPG benefits from economies of scale achieved and maintained by NHSS such as NHSS’s purchasing power for IT related products and services.
- It continues to drive efficiencies in the form of a contracted reduction in the cost of Base Services effective October 1, 2009.
- It transfers service delivery risk to NHSS, with financial penalties if specified service levels are not met.
- The outsourcing arrangement provides OPG with a ready source of highly trained staff with technical expertise.
- It establishes a variable pricing structure which allows OPG to adjust its IT service requirements to match changing business needs.