

ATTACHMENT 4

ASSET MANAGEMENT AND PROJECT REVIEW PROCESSES

OPG's asset management and project review processes are largely unchanged from EB-2010-0008. Their description is provided for reference.

1.0 ASSET MANAGEMENT

OPG's investments and initiatives are targeted at programs that will result in increased generating capacity, extended service lives, improved performance, and reduced long-term operations and maintenance costs.

In addition to improving performance of its existing assets, OPG also evaluates development initiatives with respect to its regulated facilities which can include plant life extensions, plant redevelopments or new supply developments. These development initiatives are typically larger in size, have higher risk profiles and longer time horizons than the projects held within the business unit portfolios. These potential investments are subject to more rigorous internal evaluations and scrutiny during the approval process.

2.0 PROJECT PORTFOLIOS AND SUPPORTING DOCUMENTATION

As part of the business planning process, business units submit project lists that have been prioritized to maximize value and address regulatory requirements while considering risks, corporate business objectives, asset management processes, and funding guidelines. All known projects necessary to meet work program requirements and having cash flows within the business plan time horizon are listed. The total cost of the projects must be within the funding guidelines.

The project list is a snapshot of the project work intended to be done over the business plan horizon. As time progresses, priorities may be re-set and the project list may change as

dictated by the needs of the business. Details regarding the prioritization process are provided later in this schedule.

2.1 Planning Business Cases

“Planning” business cases, or project screening forms in nuclear, are required for major projects (projects with cash flows of at least \$1M during the budget year and/or at least \$5M in any of the future years of the business planning horizon) that are planned to commence within the plan period. Inclusion of a project in the business plan does not constitute approval to proceed with the project. Request for project approval and release of funds to commence work on a project is a separate process and requires a more comprehensive business case summary (“BCS”). Business case requirements for project release are discussed later in this schedule. Planning business cases are a preliminary and usually more condensed version of the full BCS.

2.2 Project Categorization

Investments must also be categorized according to the type of benefit they are expected to produce. Investments fall within the following three categories established by OPG:

- Value Enhancing – Discretionary investments that promise value creation or strategic opportunities, such as added revenues, reduced costs, increased efficiencies, or new business opportunities.
- Regulatory – Expenditures required to satisfy environmental, safety or other requirements in law or regulation to allow the continued operation of existing facilities.
- Sustaining – Required to maintain existing infrastructure and facilities at their current performance level.

2.3 Project Prioritization Process

As the business units compile their project lists, the total cost of all initially identified work may exceed funding guidelines and/or the business unit’s capacity to undertake the work during the planning period. Prioritization processes are then applied to assist with the selection of the highest priority projects while remaining within the funding guidelines and resource capabilities. Since business units manage different assets, prioritization approaches

are also unique to each business unit. The approach for regulated hydroelectric facilities is presented in Ex. F1-1-1 (project management is described in Ex. D1-1-1) and that for nuclear projects is presented in Ex. D2-1-1. However, business unit prioritization approaches have common elements such as value, consideration of risks, and regulatory compliance.

3.0 BUSINESS CASE REQUIREMENTS FOR PROJECT RELEASE

Approval is required for the release of funds to undertake project work. The documentation for seeking approval is a Business Case Summary (BCS), which provides an explanation of the need and the business opportunity, along with an analysis of feasible alternatives for meeting this need and the rationale for the recommended alternative.

Requests for releases of funds are approved in accordance with the OPG Organizational Authority Register ("OAR"). The OAR sets out delegated authorities within OPG, and defines approval limits for decisions made on behalf of the corporation. Approval requirements are based on the amount of funds being released, with more restrictive requirements for projects of a strategic nature or unplanned work (projects not identified in the project portfolio during business planning). The OAR also specifies authorities for approval of variances for previously released projects, and for superseding releases where projects must be reconsidered due to significant scope, schedule and/or cost changes.

Functional reviews of BCSs are also carried out to ensure that they meet the criteria for the quality and completeness of the information required to enable an informed decision on approval of the project release. The functional review is required where there is a significant impact on the function or its deliverables. For example:

- Projects with substantial IT requirements are reviewed by the relevant IT Department.
- Projects with significant legal or contractual issues are reviewed by Law Division.
- Projects involving real estate transactions or leasing of office spaces are reviewed by Real Estate Services.

- Projects with significant labour relations or health and safety issues are reviewed by People and Culture.

4.0 POST IMPLEMENTATION REVIEW PROCESS

The post implementation review (“PIR”) process is used by OPG to assess achievements following completion of projects. Specifically, a PIR is an appraisal process designed to evaluate whether planned results of a given investment have been met following project completion. The two main objectives of the PIR process are to verify whether the benefits stated in the project business case were realized, and to capture the lessons learned from each project so that they can be applied to improve future projects and investment decisions.

Post implementation reviews follow a simplified or comprehensive format depending on the size and scope of the investment involved. All projects, excluding those selected to have a comprehensive PIR, must undergo a simplified PIR as specified in the PIR plan, ideally within six months of the project being completed. The simplified PIR focuses on validating whether the stated benefits / results were realized.

OPG selects a number of complex or high value projects to undergo a comprehensive PIR within each business planning period. A comprehensive PIR is an independent and broad review of a completed project. It is an intensive exercise requiring a multi-disciplinary team, ideally independent from the project team, to review all phases of a project. It provides detailed feedback on how the project was developed, planned, and executed to help gather lessons for future investments. It is only performed on a small number of projects due to the high resource requirements.