INFORMATION TECHNOLOGY

INTRODUCTION AND SUMMARY OF A&G – MANDATE AND RESPONSIBILITIES

The Information Technology & Services (“IT&S”) division provides the systems used by THESL, including billing, engineering and corporate applications support. IT&S is a full service provider and technology enabler supporting THESL business units by delivering the hardware, software, storage and network infrastructure required to run THESL software applications. This includes a mixture of legacy-based systems, standard off-the-shelf software packages and in-house developed products all of which are established within an architectural and governance framework. These applications are critical to the provision of safe and reliable distribution service and the effective operation of THESL’s business units.

IT&S’ primary mandate is to ensure that THESL’s activities are supported in a reliable, timely and cost-effective manner while providing high quality products and services. To meet this mandate, the goals and responsibilities of IT&S are:

- To partner with business units, identifying and prioritizing products and services needed to attain specific goals, objectives, and aspirations;
- To build, maintain, enhance IT’s governance framework to fully accomplish THESL’s corporate mission;
- To deliver and manage the progress of projects and services as committed;
- To provide the people in the IT&S organization the support needed in meeting our commitments; and
- To monitor and manage the progress of major commitments made against budget, scope, cost.
The organization structure shown in Figure 1 has been in place since 2007. This structure provided for a service-oriented focus on effective and efficient project delivery and support of operations across the organization. The changes introduced by the structure also emphasized the IT&S commitment to governance, security, and data management, which have since been recognized by the organization. Now, after two years in this structure, IT&S is using its recently implemented processes to manage, measure and optimize the realization of business value from the investment in IT, and help with the appropriate management of risk.

![Figure 1: Information Technology & Services Organization Structure](image)

**INFORMATION TECHNOLOGY & SERVICES ORGANIZATION**

The **IT Strategy and Governance** department is responsible for IT strategy, portfolio management, business planning, regulatory compliance, risk management, internal controls and enterprise architecture including the development and implementation of the governance framework (Control Ojectives for Information and related Technology (“COBIT”)). This ensures that IT&S is aligned with THESL’s business such that business activities are properly enabled and business benefits are maximized. It is also responsible for gathering and documenting anticipated benefits.

The **Program Delivery** department is responsible for the delivery of all IT-enabled projects. The project office provides project reporting and project measurement using the Application Development framework and continuously refined Systems Development
Life Cycle (“SDLC”) process to ensure alignment between IT&S and THESL’s business units.

The Application Support department provides performance and capacity planning; Client Partnership Agreements (“CPA”) development and management; 2nd and 3rd level application systems support, service requests and maintenance (issues that are escalated from the 1st level Help Desk); application back-up and recovery planning; critical systems monitoring and engagement of stakeholder groups to understand business unit support needs.

The Technology Infrastructure department is responsible for servers, computers, software, telecommunications, radio, internet and other network resources. These include: enterprise and departmental file services; enterprise database and operating systems; web and application servers; enterprise storage; storage area network; network attached storage; 1st level client support (Help Desk service); 2nd and 3rd level technology infrastructure services and back-up and recovery operations.

The Information Security department is responsible for the development and enforcement of policies and standards that are related to information security, business continuity and disaster recovery.

The Business Intelligence and Management Information System department enables business units to manage their information in ways that help increase efficiency and control costs. This is accomplished by ensuring data completeness, accuracy and validity. This service is provided through the use of the following technologies: business intelligence and data mining tools, management information reporting tools, data cleansing and transformation tools, data mart and data warehouse.
IT&S allocates a portion of its costs to THESL business units based on their use of computers and systems. The allocation is based on usage. The cost figures shown in Table 1 below are net and include the recovery of allocated costs.

### Table 1: IT&S Costs ($ millions)

<table>
<thead>
<tr>
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<th>2008 Board-Approved</th>
<th>2008 Historical</th>
<th>2009 Board-Approved</th>
<th>2009 Bridge</th>
<th>2010 Test</th>
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<tbody>
<tr>
<td>Costs</td>
<td>21.8</td>
<td>21.4</td>
<td>22.1</td>
<td>22.3</td>
<td>25.2</td>
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#### 2008 TO 2009 VARIANCE EXPLANATIONS

The variance of 0.9 million between 2008 actual and 2009 forecast is mainly due to payroll increases, and incremental maintenance contracts required to support new systems introduced in production.

#### 2009 TO 2010 VARIANCE EXPLANATIONS

There are many factors that have driven the IT&S budget figures in opposing directions. Some of these have led to cost increases, and others to cost reductions.

The main contributing factors that lead to operational cost increases between the bridge year and the test year are:

- Payroll and labour increases ($1.0 million);
- Operational impact of the implementation of several major initiatives that have entered the production environment during the bridge year ($2.3 million);
- Market increases on vendor maintenance contracts and lease contracts ($0.3 million); and
- Training budget increases to respond to training requirements for staff in the support of current technologies that are being implemented at THESL. These training costs have moved from capital projects to operational activities due to the new GAAP and IFRS rules ($0.6 million).
The main contributing factors that lead to operational cost reductions are:

- Operational process improvements and efficiencies leading to the overall reduction of external staff (-$0.3 million);
- Conversion of temporary contract staff to full-time employees (-$0.2 million); and
- Application and technology infrastructure consolidation to reduce maintenance contract costs as well as re-negotiation of existing contracts to reduce operational costs (-$0.8 million).

PAYROLL COSTS EXPLANATION

The majority of staff is in the Application Support and Technology Infrastructure departments, performing the daily operational and maintenance functions necessary to operate THESL’s business. The balance of the full-time staff is split between Program Delivery, Governance, Security and Business Intelligence. Their mandates revolve around the implementation of new systems, strategy and governance, data security and provision of “smart” data to help the business improve efficiency and financial cost management.

The organization either has implemented, or is in the process of implementing, several new capital projects over the past few years. Each has upgraded the THESL technical platform, modernized the application state, and provided current technologies upon which future business requirements can be more efficiently implemented. IT&S expects that without any technology and process improvements, such a large increase in workload would have resulted in a marked increase in full-time headcount and related payroll cost. In total the number of servers has grown from 250 to over 600 in the past three years. The Smart Meter initiative alone has added 60 servers, over 6,000 communication lines, and the support of over 12 terabytes of data.
In addition to these current initiatives, IT&S will also be supporting the new and substantial requests for future investment in Smart Grid technologies and infrastructure, initiatives that will assist THESL in developing aspects of the *Green Energy and Green Economy Act, 2009* as well as the financial implementation to support IFRS.

Despite all of the stated pressures on increasing headcount, support for these new technologies is being addressed by an increase of four full-time employees.

IT&S intends to also convert 14 contractors to full-time positions. The resulting increase in payroll will be offset by a corresponding reduction in expenses in the temporary contract staffing costs of those currently providing those services. This will allow IT&S to continue supporting its infrastructure and applications in the most cost effective manner.

The anticipated increase in payroll costs are also partially due to annual inflationary pressures and payroll increases expected to occur in 2010.

**External and Contract Services**

Maintenance contract costs show year-over-year increase due to several enterprise-wide capital initiatives that have a significant effect on operational costs. Major implementations of the new CIS system, SAP for the support of new IFRS requirements, Data Warehousing/Business Intelligence and the Identity and Access Management software, amongst others, result in net new increases to THESL operating costs beginning in 2010, totaling a $2.4 million increment to the maintenance contracts.

In order to minimize rising maintenance costs as a result of these initiatives, operational projects continue in consolidating legacy applications and servers. Other measures being
taken to maintain and lower costs include longer term agreements and negotiating recessionary pricing on vendor offerings.

Educational and Training Costs

An increase to Educational budgets to provide training for the expanding technology that IT&S will be supporting with new initiatives requires an emphasis in training and an investment in our staff. As THESL moves towards becoming a leader in the Smart Grid and related technologies, IT&S must be prepared to fulfill its role in assisting the business to reach these goals. These training costs, despite being directly related to capital projects, can no longer be capitalized under the IRFS rules and the new Canadian GAAP rules. This, therefore, has a net impact on the O&M budgets.