

# Service Plan

For Fiscal Years 2005/06 to 2007/08

February 2005

# Message from Board Chair to Minister of Energy and Mines

# 27 January 2005

On behalf of the Board of Directors, the management and employees of British Columbia Transmission Corporation ("BCTC"), I am pleased to present the Corporation's 2005/06 – 2007/08 Service Plan.

Under the *Transmission Corporation Act*, BCTC is an independent, government-owned Crown Corporation, regulated by the BC Utilities Commission (BCUC) and reporting to the Minister of Energy and Mines. BCTC began operations in August 2003 as part of the government's *Energy for our Future: A Plan for BC*.

The creation of an independent transmission company directly supports the objectives of the Energy Plan, including:

- continuing access to reliable, low-cost electricity;
- expanding the contribution of the electricity industry to BC's economy through the provision of open and non-discriminatory access to BC's electric transmission system for all users;
- encouraging private investment in generation; and
- securing access to the western North American wholesale electricity market.

BCTC is fully responsible for operating, maintaining and planning for the growth of our province's electric transmission system.

During its first full year of operation, BCTC has built a strong foundation for the future, including maintaining and improving transmission services, completing several key regulatory building blocks, establishing strong relationships with stakeholders and First Nations, and creating an organization with highly qualified and talented individuals. While work is on-going and more needs to be done, significant progress was made. Some of the key accomplishments over the last year include:

- Implemented a new Asset Management System, a world-class program that extends the life of transmission assets and reduces costs, while maintaining or improving current reliability;
- Proposed to the BCUC an innovative new open access tariff that offers new services for independent power producers that are aimed collectively at reducing the cost of transmission service and helping to facilitate their new power projects;
- Filed an application with the BCUC to upgrade the existing technology systems and consolidate control centres. The advanced applications proposed will give transmission customers faster market access and improved services;

- Successfully completed an operational audit by the Western Electricity Coordinating Council (WECC) and were commended for our "successful operation of a very large and geographically dispersed transmission system";
- Received approval of BCTC's first Transmission System Capital Plan, which proposes a \$2.7 billion investment in the grid over the next 10 years; and
- Launched an open and transparent public involvement process that ensures British Columbians are informed and actively involved in discussions about major transmission initiatives proposed in our Capital Plan.

We are both proud of our accomplishments and excited about the opportunities that the British Columbia Transmission Corporation creates for all of our customers, our shareholder, our economy and our employees. We look forward to making significant progress on our strategic initiatives in the coming year.

The 2005/06 - 2007/08 Service Plan for BCTC was prepared under my direction and in accordance with the *Budget Transparency and Accountability Act*. I am accountable for the contents of the plan including the selection of performance measures and targets. The plan is consistent with the government's strategic priorities and overall Strategic Plan. All significant assumptions, policy decisions, and identified risks, as of 27 January 2005, have been considered in preparing the plan. I am accountable for ensuring BCTC achieves the objectives identified in the plan and for measuring and reporting actual performance.

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R.T.F (Bob) Reid Chair of the Board British Columbia Transmission Corporation

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# **Organizational Overview**

British Columbia Transmission Corporation ("BCTC" or the "Corporation") is a Crown Corporation formed in 2003 in response to the BC government's Energy Plan. BCTC's powers and functions are specified in the *Transmission Corporation Act*, which came into force in July 2003, and Key Agreements with BC Hydro designated by Order-in-Council in November 2003. BCTC reports to the Minister of Energy and Mines and is governed by an eleven member Board of Directors appointed by the Provincial shareholder. BCTC's mandate is to provide independent, open and non-discriminatory access to BC's electric transmission system, to facilitate private generation investment in BC and to maintain access to the Western North American wholesale electricity market. BCTC is responsible for transmission system operations, planning, asset management and maintenance, including system expansion and asset replacement. The transmission system assets continue to be owned and financed by BC Hydro. BCTC owns the control centre assets required for operating and controlling the transmission system.

A Shareholder's Letter of Expectations between the Minister of Energy and Mines and BCTC's Chair sets out the corporate mandate, high level performance expectations, strategic priorities and the respective roles and responsibilities of the Shareholder and BCTC.

BCTC is regulated by the British Columbia Utilities Commission ("BCUC") which approves the Corporation's revenue requirement, rates, tariffs and capital expenditures following open, public processes.

BCTC's key roles, responsibilities and services include:

- Exclusive authority for electric transmission reliability in BC;
- Operation of the transmission system, including real-time operation of transmission, generation, distribution and telecommunications systems, and transaction scheduling:
- Provision of Open Access Transmission Tariff ("OATT") services including all
  aspects of the regulatory process, tariff administration and customer relations. The
  OATT defines the rates and terms and conditions of service and interconnection to
  the transmission system. BCTC expects to receive BCUC approval of its first OATT
  filing in Spring 2005;
- Planning of the transmission system in coordination with BC generation and distribution entities and neighbouring control areas and transmission organizations;
- Asset management and maintenance of transmission lines, substations and telecommunications systems owned by BC Hydro and BCTC's control centres. The maintenance plan addresses over 30,000 specific projects with an annual expenditure exceeding \$100 million;
- Sustainment and growth of the transmission assets owned by BC Hydro and BCTC's control centre assets, to ensure reliable service for domestic customers and electricity trade. As the transmission asset owner, BC Hydro is required to finance

transmission capital expenditures as directed by BCTC, following BCUC approval. As owner of the control centre assets, BCTC funds capital expenditures on these assets, subject to BCUC approval. At 31 March 2004, the net book value of transmission assets owned by BC Hydro was \$2,630.5 million and the net book value of BCTC's assets was \$60.9 million; and

 Actions necessary to maintain low electricity rates in British Columbia, including the cost-effective management of all BCTC functions.

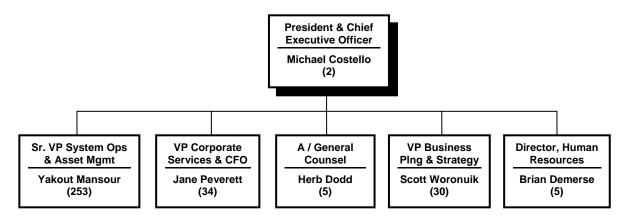
BCTC conducts business operations from its head office in Vancouver, the System Control Centre in Burnaby, four Area Control Centres in Vancouver, Duncan, Prince George and Vernon, and the Telecommunications Control Centre in Burnaby. The Corporation operates and manages an extensive network of facilities including 290 transmission stations, 250 microwave and repeater sites, and 18,600 circuit kilometres of high voltage transmission lines from 60kV to 500kV. The integrated transmission network covers the majority of British Columbia's land mass and interconnects with utilities in Alberta and the United States.

BCTC's largest transmission services customer is BC Hydro, for serving domestic electricity customers in British Columbia. Point-to-point wholesale transmission services are provided to BC Hydro, Powerex and a number of marketers for enabling electricity trade in Western North America. BCTC also provides services to BC Hydro to operate its distribution system and dispatch its generating units. Total revenues collected by BCTC from tariff services, non-tariff services and other cost recoveries exceed \$700 million per year, and recover BCTC's own operating and asset-related costs as well as approximately \$500 million for BC Hydro's asset ownership costs and allowed return.

BCTC's principal stakeholders are its transmission service customers, BC Hydro and other utilities, independent power producers, industrial customers directly connected to the transmission system, municipalities, community and environmental groups, the BCUC and the Provincial shareholder. The Corporation has an active engagement process to ensure that stakeholder and First Nations views are considered in planning and execution of projects and regulatory applications.

BCTC's corporate structure and planned F2006 FTE staff levels are shown below.

## **British Columbia Transmission Corporation Organization Chart**



A large portion of BCTC's operating and capital activities are performed by third parties under contract to BCTC. Major contractors include BC Hydro Field Services (approximately \$100 million per annum), BC Hydro Engineering (approximately \$50 million per annum) and Accenture Business Services for Utilities (approximately \$7 million per annum).

BCTC's Board of Directors is responsible for the governance and stewardship of the Corporation. The Board's role is to set and maintain corporate direction, assign responsibility to management for achievement of that direction, review and approve management's strategic plans and monitor performance against objectives. The Board is responsible for full and timely disclosure of the Corporation's financial and business performance and material developments reasonably anticipated to have significant impact on the prospects and risks of BCTC's business. The Board balances commercial and public policy objectives to ensure that the Corporation is operated in a sound commercial manner while at the same time fulfilling the public policy responsibilities assigned to it by government and considering the interests of stakeholders and First Nations.

Currently, BCTC's Board has three Standing Committees: the Audit Committee ("AC"), Human Resources Committee ("HRC") and Corporate Governance Committee ("CGC").

Composition of the Board of Directors and Standing Committee membership are:

- Robert Reid. Board of Directors Chair
- Michael Costello, President & CEO (CGC)
- Nicole Byres (CGC)
- Richard C. Campbell (HRC Chair)
- John Gill (AC)
- Norm Laythorpe (AC)
- Joanne McLeod (HRC)
- Margot Northey (CGC Chair)
- Bev Park (AC Chair)
- Gerald D. Wesley (HRC)
- Ralph A. Winter (AC)

# **Planning Context and Key Strategic Issues**

This section describes BCTC's mission, vision, values, planning context and key strategic issues as articulated in the corporate strategy developed by executive management and the Board of Directors. The corporate strategy reflects a number of business drivers that led to the establishment of BCTC and identifies risks that could affect performance.

#### Mission

BCTC's mission describes our business purpose: the business we are in and how we serve and provide value to customers and stakeholders.

"We are BC's independent electric transmission company, ensuring fair and open access to the grid and creating value and new opportunities for our customers and stakeholders by providing safe, reliable and cost-effective transmission services."

### Vision

Our vision describes the future to which we aspire.

"As an independent electric transmission company, we are globally recognized for our innovative and sustainable approach to serving our customers."

### **Values**

In pursuing its activities, BCTC's corporate and individual behaviors are guided by the values of honesty and integrity, innovation, openness and responsiveness, accountability, and sustainability.

*Honesty and Integrity*: We say what we mean; we do what we say; we treat all parties fairly and with respect.

*Innovation*: We continuously seek ways to improve; we value creativity; we set high performance objectives; we understand and effectively manage risk.

**Openness and Responsiveness**: We share information proactively; we seek and respond to feedback; we invest in understanding the needs of our customers and stakeholders.

**Accountability**: We take responsibility for our actions; we encourage diverse opinions and support decisions once made; we set clear objectives and accept responsibility for their achievement; we pursue opportunities to increase our individual knowledge of our business.

**Sustainability**: We manage the business with both today and tomorrow in mind; we employ the best people, respecting their diverse skills, experience and background, and invest in their future with us; we respect the natural environment; we work safely; we encourage balance among home life, work and community involvement.

Employee demonstration of corporate values is an important aspect of the annual performance review process. An employee's overall performance assessment takes account of achievement of set objectives and demonstration of corporate values.

## **Key Strategic Issues**

This section describes the significant strategic issues facing BCTC, internal and external risks and opportunities, and internal strengths, weaknesses and capacity constraints that could affect performance. During the planning period, BCTC does not foresee a significant change to its original mandate, nor material shifts in strategic direction. However, BCTC will continue to explore new initiatives that will enhance the contribution that the Corporation and the transmission system can make to BC's economy.

As part of its annual strategic planning process, BCTC develops a situation analysis that examines its external environment, including risks and opportunities, and BCTC's internal environment including strengths and weaknesses. The situation analysis is reviewed by executive management and the Board of Directors. It provides background and context for the establishment of corporate goals, objectives, strategies and performance measurements.

In addition, in 2004, BCTC implemented an enterprise risk management framework to ensure the ongoing identification, assessment, monitoring and mitigation of the Corporation's risks. BCTC's enterprise risk management efforts are overseen by a Risk Management Committee reporting to executive management and the Audit Committee of the Board of Directors.

BCTC's key strategic issues include the following:

## Establishing and strengthening an independent and sustainable business

At the time of its formation, BCTC set its initial strategic focus on "Building the Foundation", to ensure that the organization established its independence as a long-term and sustainable business. To this end, the Corporation has undertaken a series of activities, agreements and regulatory filings that form the basis of BCTC's core business and will continue during the planning period covered by this Service Plan.

### Specific initiatives include:

- Development of agreements with BC Hydro to ensure that BCTC is able to act with independence in managing the transmission assets owned by BC Hydro, and to ensure access to field and engineering services from BC Hydro on arms-length, commercial terms;
- Securing BCUC approval for the key operating and financial practices of BCTC, including capital spending plans, operating costs and a new tariff that encourages broader use of the transmission system. BCUC approvals ensure that BCTC has a solid business and regulatory foundation;
- Establishment of strong working relationships with all current and prospective customers to ensure that BCTC is intensely focused on providing excellent customer support;
- Planning and implementation of the System Control Centre Modernization Program to ensure that effective technologies are in place for power system operation and market access:

- Undertaking an Asset Health Baseline Study and Implementing an Asset
   Management Information System to provide accurate asset health information for
   supporting capital deployment and maintenance processes;
- Implementing new financial systems and processes to account for the transmission business and for BCTC as an independent corporation; and
- Development and implementation of a customer, stakeholder and First Nations engagement process to ensure mutual understanding of needs and issues.

Failure to properly execute these activities and to establish the new independent organization could result in risks to: (a) the reliability of the electric transmission system in BC; and (b) the independence that is essential to deliver the envisioned benefits of the Energy Plan to BC.

# Regulatory Approvals

In 2004, BCTC made its initial regulatory filings for revenue requirements, deferral accounts, capital plans and tariffs. Although the initial responses of the BCUC have been favorable and encouraging, lack of success with regulatory applications in the future could jeopardize BCTC's long-term financial viability. In developing its plans, BCTC will continue to anticipate and address regulatory issues and will actively manage its filings and stakeholder and First Nations relationships to ensure success with its regulatory filings.

# Regional Co-operation

The August 2003 eastern blackout has reinforced the need for co-operation among electric transmission providers in North America, as well as the need for strict compliance with regional and international reliability standards to avoid sanctions and operational restrictions. BCTC will continue to work closely with industry groups on reliability standards and implementation of NERC recommendations arising from the eastern blackout.

Regional Transmission Organizations (RTOs) offer the promise of enhanced reliability, efficiency and trade revenues for British Columbia. BCTC will actively monitor and participate in regional market developments to protect the province's interests. BCTC will ensure that BC's sovereignty and other interests are maintained as we collaborate on design of an RTO for the Pacific Northwest (GridWest).

## Addressing Organizational Capacity Issues

BCTC is facing a shortage of specific skills due to a maturing work force and a need for new skills, driven by changing expectations from customers, regulators and other stakeholders. Replacement and recruitment of critical skills is constrained by highly specialized educational and experience requirements, a limited resource pool from which to draw outside the Corporation, constraints on overall staffing levels and compensation limitations. Mitigation strategies include performance and succession planning, apprenticeship, training and knowledge transfer programs, and targeted recruitment.

## Relationships with Key Suppliers

BCTC relies on a number of key suppliers (Accenture Business Services for Utilities, BC Hydro Engineering and BC Hydro Field Services). Failure of suppliers to meet their commitments could jeopardize BCTC's attainment of operational and financial objectives. This risk is mitigated by contract management processes and service level agreements with suppliers which contain performance metrics and requirements for continuous improvement.

### Performance Risks

Failure to plan, operate, manage and maintain transmission assets for reliability, capacity, sustainment, safety, and environmental performance may result in equipment failure, loss of reliability and loss of public consent to operate. Failure to manage financial transactions and financial reporting may impact the Corporation's ability to meet objectives and could impact BCTC's credibility and reputation. Mitigation strategies include: setting of performance targets; establishment and adherence to processes, standards and internal controls; deployment of qualified resources; effective financial, audit, procurement and project management processes; risk reduction programs for equipment failure, catastrophic events and threats; and insurance coverage.

#### Utilization of Assets

BCTC manages an extensive transmission system. How effectively that system is used is a key issue from both a reliability perspective and a capital efficiency perspective. BCTC monitors transmission utilization as one indicator that could result in new or modified transmission services or rate designs to potentially enhance utilization of existing assets. While these changes are within the direct control of BCTC, it is noted that as the independent transmission entity BCTC does not influence the long-term usage of transmission services. In the long run, demand for transmission services is driven by domestic load and supply resource growth (for the network integration transmission service) and electricity market dynamics (for the point-to-point transmission services).

# Going forward

BCTC's initial strategy of "building the foundation" was supported by BCTC's Board of Directors in April 2004 and is currently under review by BCTC management with a view to refining the strategy with the Board in April 2005. Key business issues currently under examination include: (a) a focus on further building of relationships with key stakeholders and First Nations, including the multi-faceted business relationship with BC Hydro; (b) scenarios around the development of GridWest; (c) ensuring the correct balance between transmission system reliability and cost, and ensuring stakeholder and regulatory support for potential changes to this balance; and (d) evolving industry and market structures in interconnected markets.

# Goals, Objectives, Strategies, Performance Measures, Targets and Benchmarks

BCTC's corporate goals and objectives articulate the strategic direction that BCTC will take over the three-year planning period to move the Corporation towards its vision. BCTC has set its goals to support the goals of the government's energy plan "Energy for Our Future: a Plan for BC" available at <a href="www.gov.bc.ca/em/popt/energyplan">www.gov.bc.ca/em/popt/energyplan</a>. The corporate goals and objectives are supported by a set of strategies, initiatives, performance measures and targets. Definitions for each performance measure are provided at the end of the section, including the rationale for the measure and internal / external benchmarking initiatives that will allow comparison of performance over time. The measures will track the Corporation's progress in delivering on its key priorities and will be reported in its annual report.

The performance measures and targets for F2005 have been approved by the Board of Directors and BCTC is reporting actual performance against the targets. The targets for F2006 to F2008 have been extrapolated from the approved 2005 performance targets.

In approving the initial performance measures for the Corporation in April 2004, BCTC's Board of Directors mandated a process to review the measures used in Fiscal 2005 with a view to sharpening their definition for F2005 and subsequent years, increasing the use of external benchmarks in the setting of targets, and improving the data used to measure corporate performance. The results of this work, to be reviewed in April 2005, will result in a change to both measures and the assessment of performance against the measures. BCTC will disclose its new measures following the Board's approval in June 2005 and will report against the new measures and targets in F2006.

BCTC's objectives and strategies have been operationalized in individual department business plans to ensure alignment across the organization.

## Key Changes from 2004/05 – 2006/07 Service Plan

Material changes in BCTC's goals, objectives and performance measures, compared to the previous year's Service Plan are:

- BCTC's 2004/05 2006/07 Service Plan described the interim focus adopted during the first year of operation, pending development of a long-term strategy. The interim focus comprised an emphasis on customers and five strategic thrusts – Business, Market Development, Team, Energy Highway and Value Creation.
- The "Adequate Transmission Capacity" measure, reported in the previous Service Plan, has been replaced by "Transmission Utilization Ratio" to reflect usage of the transmission interties as a function of available capacity.
- The "Operating Costs" measure has replaced "Net Income Attributable to BCTC" as it more directly reflects those items under management's control.
- The "Transmission Access" measure has been replaced by stakeholder survey results from independent power producers, BC Hydro and industrial customers to better reflect areas under BCTC's direct control.
- The "Succession Planning / Training and Development" measure has been incorporated into the Employee Engagement Survey measure.

 Reliability SAIDI targets have been changed to reflect operating experience as an independent transmission company.

# GOAL 1: To ensure reliability and security of the transmission system

**Objective:** To meet the reliability standards of the industry in a cost-effective, safe and sustainable manner that is acceptable to our customers.

## **STRATEGIES**

 Implement programs to achieve operational excellence in core functions as a transmission operator, planner and asset manager.

## **KEY INITIATIVES**

- Implement Asset Management Project.
- Complete Asset Health Baseline Study of transmission system assets and commence Asset Health Index project.
- Commence System Control Centre Modernization Program.
- Develop, file and implement the Capital Plan, ensuring that the capital allocation decision making process is clear and supportable and that the Baseline Audit helps to inform all future capital plans.
- Plan and develop Vancouver Island 230 kV Transmission Cable Project.
- Implement formal planning co-ordination with adjacent transmission system operators.
- Develop and implement BCTC Emergency Response Plan.

				Targets			
PERFORMANCE MEASURES	03/04 Actual	04/05	05/06	06/07	07/08		
Reliability SAIDI (System Average Interruption Duration Index) <sup>1</sup>	2.1	1.9 (Dec '04 actual) 2.2 (target)	2.1	2.1	2.0		
Compliance with NERC & WECC Reliability Management Standards	Full	1 violation (Dec '04 actual) Full (target)	Full	Full	Full		

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<sup>&</sup>lt;sup>1</sup> BCTC will seek to sustain and enhance system reliability through efficiencies as opposed to incremental funding. Large improvements to system reliability would entail incremental costs and would be conditional upon BCTC receiving regulatory and customer support.

GOAL 2: To provide customers with non-discriminatory access to transmission services by removing impediments and offering services that enhance their ability to access markets or energy providers. Thus:

- encouraging new generation investment
- facilitating the direct purchase of electricity by large users

**Objective:** To ensure that independent power producers, BC Hydro and industrial customers are satisfied in all their dealings with BCTC and value our independent, transparent and responsive business approach.

### **STRATEGIES**

- Understand customer needs and improve processes for independent and nondiscriminatory transmission services, to enable customer access to markets – buyers, sellers, domestic and export.
- Create a service-driven organization that is customer-focused, responsive, results-oriented and efficient.

### **KEY INITIATIVES**

 Implement BCTC's new Open Access Transmission Tariff as approved by the BCUC, to provide open and fair access to all market participants.

- Increase transparency and clarity of transmission data, BCTC services and processes.
- Review interconnection standards, operational requirements, costing, estimating and related processes.
- Enhance and implement new customer outage notification policies and protocols.

**Targets** PERFORMANCE MEASURES 03/04 04/05 05/06 06/07 07/08 Actual Stakeholder Survey Results -49% +5% on +5% on +5% on +5% on Overall Impressions of BCTC previous very or previous previous previous (independent power producers, BC somewhat year year year year Hydro and industrial customers) (target) positive<sup>2</sup>

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<sup>&</sup>lt;sup>2</sup> Neutral responses were 42%, reflecting the short time period (7 months) between BCTC formation and date of survey.

# GOAL 3: To maintain BC sovereignty, while enhancing BC benefits from electricity trade - maintain BCTC as a crown owned company, regulated by the BCUC.

**Objective:** To build public and stakeholder understanding and support for BCTC as an independent transmission entity.

### **STRATEGIES**

- Invest in the development of long-term relationships with the British Columbia public, communities, First Nations and other stakeholders whose quality of life is impacted by our activities.
- Develop and maintain a positive relationship with the BCUC and intervenor groups.
- Take no actions that would compromise either the public ownership of BCTC and the transmission assets, or BCTC remaining under BCUC regulatory oversight.

### **KEY INITIATIVES**

- Communication with stakeholders, First Nations and the public on BCTC and GridWest.
- Increase presence of BCTC at community and industry events.
- Continue to engage in ongoing GridWest discussions and negotiations.
- Engage stakeholders and First Nations in development of long-term transmission plans, through our public engagement process.
- Establish, file and implement new Standards of Conduct for BCTC.
- Ensure that all regulatory applications (Revenue Requirements, Tariff, Capital Plan, major capital projects) are filed with complete and useful information. Incorporate stakeholder and First Nations input and provide a full explanation of BCTC's proposals.

			Targets			
PERFORMANCE MEASURES	03/04 Actual	04/05	05/06	06/07	07/08	
Stakeholder Survey Result – Overall Impressions of BCTC (all stakeholders)	35% very or somewhat positive <sup>3</sup>	+5% on previous year (target)	+5% on previous year	+5% on previous year	+5% on previous year	

<sup>&</sup>lt;sup>3</sup> Neutral responses were 53%, reflecting the short time period (7 months) between BCTC formation and date of survey.

## GOAL 4: To create the "model" transmission company

**OBJECTIVE:** To build a stand-alone transmission company that is a model of operational and asset management excellence

## **STRATEGIES**

- Achieve operational excellence in core functions as a transmission operator, planner and asset manager.
- Create a service-driven organization that is customer-focused, responsive, results-oriented and efficient.
- Invest in the development of our skilled workforce, in pursuit of high performance, innovation and operational excellence.

### **KEY INITIATIVES**

- Complete establishment of systems, processes, policies and resources required to operate independently.
- Complete and implement Service Level Agreements with BC Hydro.
- Implement new financial systems for BCTC.
- Establish outsourcing strategy and implement a separate services contract with ABSU.
- Implement new Performance Management System.
- Develop and implement succession planning and workforce renewal strategy.
- Develop performance measures and industry benchmarks.

				Targets			
PERFORMANCE MEASURES	03/04 Actual	04/05	05/06	06/07	07/08		
Operating Costs <sup>4</sup>	\$38.3M <sup>5</sup>	\$100.6M (forecast)	\$178.4M	\$179.2M	\$181.7M		
Transmission Utilization Ratio <sup>6</sup>	68%	63% (Dec '04 actual) 65% (target)	65%	65%	65%		
Number of Preventable Lost-Time Accidents	0	0 (Dec '04 actual)	0	0	0		
Number of Preventable and Reportable Environmental Incidents	2	2 (Dec '04 actual)	2	2	2		
Completion of Planned Safety & Environment Management Pgms	N/A	95% (Dec '04 actual) 85% (target)	95%	95%	95%		
Employee Engagement Survey - Alignment Pillar	3.2	3.3 (target)	3.4	3.5	3.6		

<sup>&</sup>lt;sup>4</sup> Change from 04/05 to 05/06 reflects change in financial accounting from Phase 1 to Phase 2 (see Summary Financial Outlook, page 17). See also Note 5 on the operating cost measure for 03/04.

<sup>5</sup> Operating costs in 2003/04 were not for a full fiscal year and reflect the partial transition of OMA activities and contracts from BC Hydro to BCTC's accounts.

<sup>&</sup>lt;sup>6</sup> As noted previously, long-term transmission utilization and demand for transmission services are not within BCTC's direct control. The targets are set to ensure no deterioration from present levels.

# **Performance Measure Descriptions, Rationale and Benchmark Information**

A description of each performance measure is provided in this section, including the rationale for the measure. BCTC is developing its benchmarking approach with industry peers and will report benchmark comparisons when available. In the interim, comparisons will be made to historical BCTC performance.

Reliability SAIDI (System Average Interruption Duration Index) – This measure is the average amount of time that each transmission delivery point is interrupted in a year. It assesses BCTC's effectiveness in providing high service reliability. Reliability statistics for independent transmission companies have a limited history given the fairly recent disaggregation of vertically integrated utilities. Additionally, definitions among companies are inconsistent, leading to a very limited universe of comparable data points. Until such industry comparatives are available, BCTC's results will be compared to historical performance.

Compliance with NERC and WECC Reliability Management Standards – BCTC's goal is to achieve full compliance with transmission reliability standards established by the Western Electricity Coordinating Council (WECC) and security standards established by the North American Electric Reliability Council (NERC). The August 2003 Northeast blackout has reinforced the urgency of high reliability standards among interconnected utilities. Similarly, high vigilance is needed to protect operating systems from intrusion. Compliance with NERC and WECC standards is an industry imperative. The 2004 WECC audit of BCTC found full compliance with all reliability standards set by the WECC. Statistics regarding compliance of other utilities are not available for benchmarking purposes.

Stakeholder Survey – IPPs, BC Hydro, Industrial Customers and Municipalities – These annual surveys of key stakeholders assess awareness, impressions and satisfaction with BCTC. The measure compares results with a baseline stakeholder survey completed in March 2004. Results assist BCTC in refining corporate goals and future actions in light of the needs of customers and stakeholders. The results will be compared to historical BCTC performance.

**Operating Costs** – From F2006 forward, this measure is BCTC's system operation and asset management costs. These are the costs for which BCTC is directly responsible and over which BCTC exercises managerial control. The results will be compared to BCTC historical performance. Note that for F2004 and F2005, the operating cost measure was defined as the costs that were recoverable from BC Hydro (including some asset-related costs). Therefore, in those two years, the measure is not the same as the actual operating costs incurred by BCTC (as shown in the Summary Financial Outlook section, page 17).

**Transmission Utilization Ratio** – This is the ratio of total transmission capacity sold on the interties to total transmission transfer capacity of the interties. It measures how much of the intertie capacity is actually used by customers. Comparative industry statistics are not available thus the results will be compared to historical BCTC performance.

**Number of Preventable Lost-Time Accidents** – A preventable lost-time accident is one in which BCTC and its employees failed to foresee a risk and did not act to prevent an accident. It supports the fundamental BCTC objective of employee safety. Comparable transmission industry statistics are not available, therefore results will be compared to historical BCTC performance.

**Number of Preventable and Reportable Environmental Incidents** – Reportable environmental incidents are primarily the result of human error, either by BCTC employees or by contractors. The measure supports BCTC's Environmental Responsibility Principles. Comparable industry statistics are not available, therefore results will be compared to historical BCTC performance.

**Completion of Planned Safety and Environmental Management Programs** – BCTC has implemented new safety management and environmental management programs. This measure records progress in completing the annual calendar of actions that are designed to prevent safety and environmental incidents. It places focus on achieving the lost time and preventable incident targets. It is an internally benchmarked measure that compares actual performance against targets.

**Employee Engagement Survey Alignment Pillar** – This measure rates BCTC's progress in building productive engagement (alignment) within the workforce. It assesses progress in building a high performance organization. The measure will be compared to BCTC's historical performance.

# Alignment with Government's Strategic Plan

BCTC's Service Plan is consistent with the provincial government's Strategic Plan (available at <a href="www.bcbudget.gov.bc.ca/stplan">www.bcbudget.gov.bc.ca/stplan</a>) and contains objectives and activities that support each of the province's overriding goals of economic growth, a supportive social fabric, and healthy communities and environment.

## Goal 1. A strong and vibrant provincial economy

BCTC plays a major role in facilitating a robust electricity industry, which is integral to economic development in BC, and in maintaining a competitive advantage in the production of goods and services. Both the Energy Plan 2002 goals and BCTC goals are strongly aligned with Goal 1 of the Province's Strategic Plan. The creation of BCTC advances an important Energy Plan commitment to improve transmission access and planning, and to provide a more focused approach to the operation and management of British Columbia's publicly owned electric transmission assets. A key commitment of the Energy Plan is to encourage increased private sector participation in meeting British Columbia's growing electricity needs. BCTC has a key role in facilitating the interconnection of new generation facilities being developed by the private sector. BCTC's proposals for new rate structures for BC Clean Electricity, open season processes and new approaches to interconnections, currently under review by the BCUC as part of the Open Access Transmission Tariff filing, will enhance the ability of the independent power sector to contribute to the Province's electricity needs in a cost-effective way. BCTC is expecting a BCUC decision on its Tariff filing in April 2005.

## Goal 2. A supportive social fabric

A secure, reliable and low cost supply of electricity enables a strong social structure to support a healthy and productive workforce. BCTC strives for high levels of customer service, purchases goods and services from a wide range of BC suppliers, and employs a highly skilled workforce. Revenues collected from electricity trade, which is facilitated and enhanced by the existence of BCTC as an independent transmission entity, provide general revenue to the province to finance key social and economic programs.

## Goal 3. Safe, healthy communities and a sustainable environment

BCTC's operations can have a significant impact on BC's land base and resources. For this reason, transmission system operations and asset management functions are conducted with the highest regard for public and employee safety, respect for the environment, and long-term sustainability of BC's natural resources and communities.

# **Summary Financial Outlook for the Service Plan Period**

BCTC commenced business operations on 1 August 2003. The *Transmission Corporation Act* specifies a transitional period before BCTC assumes full responsibility for providing transmission services. During the period from 1 August 2003 to 31 March 2005 (Phase 1), BCTC administers BC Hydro's existing Wholesale Transmission Service (WTS) tariff on BC Hydro's behalf. During this phase, BCTC provides transmission system operation and asset management services to the BC Hydro Transmission Line of Business for a service fee sufficient to recover BCTC's costs and to earn a return on equity. As a result, BCTC's F2004 and F2005 financial plans and budgets were consolidated with BC Hydro's accounts.

Commencing 1 April 2005 (Phase 2), BCTC will operate as a fully regulated independent utility offering wholesale transmission services under its own Open Access Transmission Tariff, expected to be approved by the BCUC in April 2005. Accordingly, from 1 April 2005, BCTC's accounts are not consolidated with those of BC Hydro.

This financial outlook reflects the expenses and revenues attributable to BCTC and does not include expenses and revenues attributable to BC Hydro for transmission asset ownership. These expenses and revenues are included in the BC Hydro Service Plan.

	Pha	ise 1	Phase 2				
	F2004 Actual	F2005 Forecast	F2006 Budget	F2007 Forecast	F2008 Forecast		
Revenues	42.3	105.1	204.8	203.0	201.4		
Expenses							
Operating costs	(36.1)	(83.5)	(178.4)	(179.2)	(181.7)		
Asset related costs	(5.3)	(18.2)	(22.8)	(18.3)	(11.8)		
Total Expenses	(41.4)	(101.7)	(201.2)	(197.5)	(193.5)		
Net Income	0.9	3.4	3.6	5.5	7.9		
BCTC Capital Budget <sup>7</sup>	9.3	30.2	37.0	82.2	31.7		
FTE's	294 <sup>8</sup>	328	329	329	321		

F2004 revenues and costs are for the 8-month period, commencing 1 August 2003. F2004 and F2005 costs include BCTC labour, services contracted from outside organizations, ABSU costs and BC Hydro service provider costs for work performed on BCTC assets only. Costs for work on BC Hydro owned assets are accounted for in BC Hydro's Service Plan. The forecast changes in BCTC revenues and costs between F2005 and F2006 are associated with the transition of BCTC as a provider of transmission services to BC Hydro in F2005, to a regulated utility in F2006.

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Capital budget for transmission assets owned by BC Hydro is shown in the Capital Plan section.
 BCTC's original budget forecast was 325 FTE's to fully staff the Corporation. The 294 FTE's noted for F2004 represent partial staffing during the first year start-up phase.

## **Key Forecast Assumptions**

#### Revenues

Revenues comprise transmission tariff revenues, non-tariff revenues and cost recoveries. In F2004 and F2005, BCTC earns service fee revenues from BC Hydro for the provision of operations and asset management services. Transmission revenues (WTS) will remain with BC Hydro during this transition phase. Commencing in F2006 (Phase 2), BCTC will earn transmission revenues under its own tariff. Forecast revenues for F2006 to F2008 reflect a 13.52% return on equity as filed with the BCUC in December 2004 as part of BCTC's Revenue Requirements Application. The BCTC revenue represents the amount collected through the transmission tariff and other recoveries that are allocated to BCTC to recover its own operating and asset related costs and allowed return. The balance of revenues collected through the transmission tariff are directed to BC Hydro to recover its transmission asset related costs, corporate overheads and allowed return.

## **Operating Costs**

Operating costs comprise costs for system operations, asset management and maintenance, general and administration and purchase of ancillary transmission services. Consistent with Phase 1 operations, F2005 operating costs include labour, outside services, ABSU charges and other operating costs directly associated with BCTC's operation. During F2005, BC Hydro continues to account for the work performed by BC Hydro internal service providers related to transmission system maintenance.

Commencing in F2006 (Phase 2), all maintenance and operating costs will be directly incurred by BCTC and recovered through a service fee to BC Hydro for Asset Management and Maintenance and through the Open Access Transmission Tariff. Transmission asset-related costs will remain with BC Hydro's Transmission line of business, including Aboriginal and properties services, asset retirement obligations, an allocation of BC Hydro's corporate costs, finance charges, depreciation, taxes, and allowed return on equity. Commencing in F2006, operating costs also include ancillary transmission services as BCTC assumes responsibility for the Open Access Transmission Tariff.

### Asset Related Costs

BCTC's asset related costs are primarily depreciation and finance charges associated with the system control assets.

### Net Income

Net income is based on earning an allowed return equivalent to BC Hydro's rate of return on deemed equity. The F2006 figure reflects BCTC's forecast that the Corporation's deemed equity will be 39.4% of its total capitalization and that the allowed rate of return will be 13.52%.

## Full Time Equivalents

The F2005 forecast reflects the filling of F2004 vacancies (32) and the addition of two employees. The F2006 and F2007 forecasts reflect the addition of one employee. The F2008 forecast reflects FTE efficiencies from control centre consolidation associated with the System Control Centre Modernization Project.

#### Forecast Sensitivities and Risk Factors

Key risks for BCTC's financial performance include:

- Revenue is driven by the volume of transmission system use and market determined prices for point-to-point service, which depend on market conditions each \$0.10 /MW.h change in price will change short-term point-to-point revenue by \$0.2 million per year;
- BCUC approval of the Open Access Transmission Tariff ("OATT");
- Collective Agreements expiring at the end of March 2005 and the potential for a disruption to services as a result of job action;
- Interest rates may vary from forecast rates each 1% change in interest rate will change the gross finance charge of new debt by \$0.3 million in F2006 and by \$0.7 million in F2007;
- System reliability BCTC is operating and maintaining a transmission system that is aging and subject to increasing use; and
- Compliance with reliability standards and criteria as established by the Western Electricity Coordinating Council ("WECC") and North American Electric Reliability Council ("NERC").

# **Capital Plan**

BCTC is accountable for managing and directing investments in the transmission system assets that continue to be owned and financed by BC Hydro. BCTC owns and finances capital assets that are required to operate the transmission system and to carry out its mandate. Investments in both the BC Hydro-owned assets and the BCTC-owned assets are presented in the Transmission System Capital Plan which is subject to review and approval by the BCUC. BCTC's capital plan filings and BCUC Decisions are available on the BCTC website, including BCTC's first capital plan filing made on 31 May 2004. Where individual capital projects exceed \$50 million, BCTC will prepare major capital project plans for public disclosure pursuant to the *Budget Transparency and Accountability Act*. A summary of all Transmission expenditures is presented below:

Transmission Capital Expenditures Foreca (\$Millions)	st				
	F2004 Actual	F2005 Fcst	F2006 Budget	F2007 Fcst	F2008 Fcst
Assets Owned by BCTC	9	30	37	82	32
Transmission Assets Owned by BC Hydro					
Sustaining Capital	130	102	104	105	106
Growth Capital	47	42	152	241	157
Contributions In Aid of Construction	(10)	(8)	(16)	(14)	(13)
Total – Transmission Assets Owned by BC Hydro	167	136	240	332	250
Total Transmission System Capital	176	166	277	414	282

## Capital Expenditures – Transmission Assets Owned by BC Hydro

There are two main drivers for capital investment in the transmission assets owned by BC Hydro: sustainment of performance capability; and growth to meet load increases and customer interconnection requests.

### Sustainment Capital

Sustainment capital includes capital repairs, refurbishments and replacements to existing transmission assets owned by BC Hydro, to extend the useful life of an asset or to replace an asset prior to it reaching the end of its useful life. Performance deterioration, end of life replacements and risk reduction programs will drive investments over the next 10 to 15 years. BCTC's planning process includes a formal sustainment capital replacement strategy to address the large number of transmission assets approaching the end of their useful lives and to address performance deterioration of some asset groups. The process identifies asset replacement priorities over a period of several years and manages them by their value contribution to system performance and reliability.

## **Growth Capital**

Growth capital additions and reinforcements are requested and paid for by transmission service customers as they connect to the transmission system or as their demand for service grows. Growth capital is forecast to increase significantly over the next few years as a result of IPP interconnections and BC Hydro resource additions. Where these investments are made pursuant to transmission tariff requests for service, the process for determining investments and the sharing of costs is described by the OATT tariff.

## Capital Expenditures – Assets Owned by BCTC

Capital expenditures for assets owned by BCTC comprise control centre technologies, business support systems, information technology and facilities management.

BCTC's most significant capital project is the System Control Modernization Project, totaling \$134 million. BCTC requires information, communication systems and automated operation systems to operate the integrated transmission system and to facilitate electricity market access to Alberta and the United States. The current Energy Management System and the Supervisory Control and Data Acquisition Systems are based on 1960's operating models and are at the end of their useful lives. The existing systems are inefficient and do not have the features and functionality required in an open access and evolving regulatory and business environment. In October 2004, BCTC applied to the BCUC for a Certificate of Public Convenience and Necessity to proceed with this project.