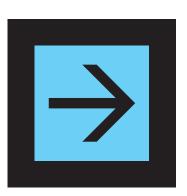
Our purpose is simple

Reliable power, at low cost, for generations

Reporting on Triple Bottom Line Performance





contents

# BC Hydro at a glance

#### ABOUT BC HYDRO

BC Hydro is a commercial Crown corporation owned by the Province of British Columbia and regulated by an independent body, the B.C. Utilities Commission (BCUC). BC Hydro is one of North America's leading providers of clean, renewable hydropower and the largest electric utility in British Columbia, serving 94 per cent of the province's population.

#### **ABOUT THIS REPORT**

Reporting on sustainability reflects BC Hydro's commitment to balance business across the three bottom lines: environmental, social and economic. This report covers our performance for the period April 1, 2004, through March 31, 2005 and integrates the Annual Report with our triple bottom line report on performance.

The performance targets referenced in this report were established in our February 2004 annual Service Plan for the three-year period 2004/2005 through 2006/2007. The Service Plan provides a high-level, strategic look at our business and sets out the targets and measures by which our performance can be evaluated.

BC Hydro operations included in the performance data presented in this report comprise the Generation, Distribution, Engineering and Field Services Lines of Business and our energy marketing subsidiary, Powerex. Although the financial results include the consolidation of operating results for British Columbia Transmission Corporation (BCTC), BCTC also prepares and publishes its own Service Plans and Annual Reports with financial and performance data.

To meet the requirements for both Annual and Sustainability reporting, this report has been prepared in accordance with British Columbia's *Budget Transparency* and *Accountability Act* and Canadian generally accepted accounting principles (GAAP), and in accordance with the Global Reporting Initiative (GRI) 2002 Guidelines.

A comprehensive list of performance data that supports BC Hydro's commitment to triple bottom line reporting is available in the GRI Comparative Index.

# Lines of Business Scorecards .....4 Letter from the Chair to the Minister .......9 Directors, Officers and Senior Management . . . . 64 Committees of the Board of Directors . . . . . . 65

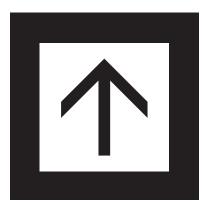


# Performance at a glance for the Year Ended March 31, 2005

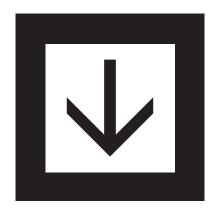
# This is a transition year

for reporting on our Service Plan performance measures. The BC Hydro Overall and Lines of Business performance targets were established in our February 2004 Service Plan for the three-year period April 1, 2004, through March 31, 2007. The performance results reported here align to the 2004 Service Plan measures, but are grouped under the six key categories of our new 15 long-term goals that were announced in 2004. Performance measures and targets are still being developed for some categories and will be included in the 2006 Service Plan, to be issued in February 2006.

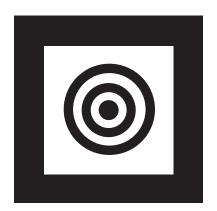














# Performance at a glance for the Year Ended March 31, 2005

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вс Ну	dro Overall		Service Plan Results					
Long-term Goals	Strategies	Service Plan Measures	03/04/01/03/	04/05/3964	0405 ACTURA	Result	, 2000 1966 1966 1966	
Customer	Keep electricity rates low.	Customer Satisfaction (%)	88	84	90	lacktriangle	84	
	Drive performance through service organizations.  Ensure the long-term health of the assets.  Acquire new long-term sources of supply to ensure secure, reliable power for expected load growth.	Reliability ASAI (%) CAIDI (hours)	99.949 2.78	99.970 2.15	99.955 2.63	<b>◎</b>	99.970 2.15	
	Develop a customer strategy to define the expected service levels (e.g., reliability).  Create a performance management culture consistent with customer service objectives.	Sustaining Capital Ratio (%)	1.2	1 – 2	1.1	<b></b>	1 – 2	
Employees	Continue to implement Strategic Workforce Planning Initiatives.	All Injury Frequency	3.0	2.7	2.5		2.3	
	Build business acumen and associated skills and knowledge necessary to succeed as a commercially focused enterprise.  Build employee commitment through increased focus on communication and recognition.  Ensure and enhance safety compliance and build awareness of health-related drivers of business performance.	Approved Strategic Workforce Positions Filled	68	71	71		70	
Environment	Issue calls for green and sustainable resources.  Maintain growth of Power Smart programs.  Embed sustainability, transparency and accountability into strategic planning, decision-making and culture.  Develop relationships and manage issues through proactive and ongoing interaction with stakeholders and First Nations.	Environmental Regulatory Compliance (incidents) Conservation gigawatt hours New Electricity from Clean Energy (%)	18 834 52% (10 Year Average)	28 1,315 50% (10 Year Average)	1,355 61% / 35% (See table and notes on page 50)	<b>↑</b>	17 1,886 50%	
Financial	Be efficient and effective by managing the business in a commercial and sustainable manner.  Ensure BC Hydro customers continue to benefit from electricity trade.  Attain B.C. Utilities Commission approval for proposed revenue requirements.  Work with regulators and stakeholders to create regulatory framework and structure.  Develop a commercial relationship with B.C. Transmission Corporation.  Implement the Heritage Contract.  Drive maximum benefit from service providers.  Continue restructuring implementation.  Optimize utilization of assets, including IT, plant performance and capital, to preserve the B.C. advantage.  Develop and improve risk management frameworks.	Net Income (\$ millions) (Before Transfers to Regulatory Accounts)	90	406	240	V	395	



# Performance at a glance Sustainability Scorecard

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# Generation

			Service Plan Results					
Long-term Goals	Strategies	Service Plan Measures	03/04 Actual	04/05 Target	04/05 Actual	Results		
Environment  Financial	Maximize the value of market opportunities.  Protect assets for the long term by ensuring that adequate maintenance and capital dollars are invested in generating plants.  Implement Asset Management discipline across Generation.  Minimize lost opportunities due to generation forced outages.  Embed Water Use Plan commitments into operations.  Continue to manage public safety in and around facilities.  Implement First Nations Protocol Agreement.  Make the most efficient use of existing resources.  Minimize impact of operations on the environment.  Maximize the financial value of the Heritage assets.  Maximize trade revenue from the Heritage assets.  Minimize the cost of energy to BC Hydro Distribution.	Average Number of Forced Outages/Unit by asset class: • Large • Strategic • Available • Thermal  Commercial Performance (%)  Resource Smart Energy Gains Put Into Service (GWh)  Cost of Heritage Electricity to Distribution (\$/MWh) (Measure replaces cost per Megawatt Hour including Electricity Purchases in 2004 Service Plan)	2.76 3.40 3.87 N/A 99.68 ————————————————————————————————————	2.20 3.60 4.80 3.00 99.50 ————————————————————————————————————	2.26 3.04 2.93 4.33 99.88 —————————————————————————————————	←		

<sup>\*</sup>The Adjusted Cost of Heritage Electricity to Distribution removes cost of energy variances related to changes in load from plan and costs eligible for transfer to deferral accounts.



# Performance at a glance Sustainability Scorecard

480VE ARGET

# Distribution

			Service Plan Results						
Long-term Goals	Strategies	Service Plan Measures	03/04 Actual	04/05 Target	04/05 Actual	Results			
Customer	Implement active management of energy supply.  Employ market-focused procurement strategy that acquires resources in a commercial, competitive manner.  Manage the customer experience and relationship with business and residential customers by understanding and meeting customer needs for choice and consultation.  Motivate customers to get the best long-term value from their use of electricity and to create a future where efficient usage is a way of life and a way of doing business.  Make commercially sound, customer-focused business	Asset Health Risk Index (%)	20	20	20	<b></b>			
 Environment	investments with customers in demand-side management and load displacement.  Effectively develop and maintain the integrity of the distribution system to deliver long-term reliable service to customers at the lowest possible cost.  Issue calls for green and sustainable resources.  Maintain growth of Power Smart programs.  Ensure 50% of new energy acquisitions are clean.	Customer-Based Generation (GWh) Green (GWh)	 258 301	 275 580	 259 720	<b>→</b>			
Financial	Implement risk management policies to manage energy costs and all other expenditures.  Support regulatory processes, including BC Hydro's revenue requirement application.  Establish Heritage Contract with Generation to allow customers entitlement to low embedded-cost energy.  Optimize strategic partnership benefits to derive maximum benefit from service providers (i.e., Accenture, Field Services and Engineering).	COMA per Customer (\$)	\$269.5	\$265.3	\$285.4	₩			



# Performance at a glance Sustainability Scorecard

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# Engineering

				an Results		
Long-term Goals	Strategies	Service Plan Measures	03/04 Actual	04/05 Target	04/05 Actual	Results
Customer	Provide engineering services to support the operation	Schedule Targets (%)	N/A	96	98	<b>1</b>
	and maintenance of BC Hydro's Heritage assets.	*Client Feedback / Satisfaction (%)	65	76	71	₩
	Develop a commercial, engineering service provider relationship with British Columbia Transmission Corporation.	Project Delivery; Capital Spending (%)	N/A	100	98	
	Know clients and their needs.					
	Improve customer integration/partnering and be the provider of choice.					
	Exceed clients' expectations.					
	Know the industry and best practices.					
	Pursue and maintain strong relationships with past, current and potential clients.					
Employees	Measure and communicate performance targets for individuals, teams and Engineering as a whole.	Approved Engineer-in-Training and Graduate Technologists-in-Training	100	100 (13	100	<b>1</b>
	Maximize employee commitment through clear	Positions Filled (%)	positions filled)	positions)	positions filled)	
	communication of expectations; focus on accountability and encouragement of innovation.	Safety Incidents	N/A	4	3	lack
	Build and maintain technical and system knowledge by investing in the training and development of employees.					
	Seek external work opportunities when not infringing on the ability to meet the commitment to internal clients.					
	Continue to emphasize safe work practices across the organization.					
Environment	Focus on continuous improvement of the Engineering Environmental Management System.	Environment – reportable incidents	N/A	4	0	<b>1</b>
	Provide technical services to support appropriate environ- mental and social performance on projects performed for clients.					
Financial	Deliver top quartile performance in selected financial and other targets.	Utilization Rate (%)	84	83	82	<b>©</b>
	Organize resources and management structure to maximize	Hourly Charge-Out Rate (\$)	97	97	97	
	focus on clients.	Work to External Providers (%)	N/A	9	17	<b>1</b>
	Align business processes for client focus and business sustainability.					
	Track service delivery.					
	Manage business performance.					
	Develop pricing strategies consistent with market prices.					

# Bolded measures were identified in the 2004 Service Plan.

<sup>\*</sup> Engineering changed its method of evaluating client satisfaction in fiscal 2005 to increase the breadth of key clients that were surveyed and to measure against metrics that they stated were important. Survey frequency was reduced from bi-monthly to bi-annual



# Performance at a glance Sustainability Scorecard

FEON ARGEY

# Field Services

			Service Plan Results					
Long-term Goals	Strategies	Service Plan Measures	03/04 Actual	04/05 Target	04/05 Actual	Results		
Customer	Emphasize the Service Provider plus strategy through ongoing service quality and product differentiation.  Operationalize Service Level Agreements via best practices review, performance reporting and establishment of an effective governance structure.  Develop a commercially focused relationship with the British Columbia Transmission Corporation.	Total Planned Work Completed (%)	100	98	100	<b></b>		
Employees	Emphasize the Safety First Strategy across the organization.  Improve safety performance by continued emphasis on training, audits and safety inspections.  Reinforce both manager and employee accountability for safety.  Develop a commercially focused mindset through focused training, communication and performance management.  Continue to develop a contingent workforce capability.  Retain and develop the skills and knowledge of both employees and contractors.  Renew the workforce through continued investment in apprenticeships and other trainee programs.	Trainee Positions Filled (number)  All Injury Frequency (incidents/200,000 hours worked)	118 5.2	133 4.7	132 4.5			
Financial	Emphasize the Continuous Improvement strategy across the organization.  Improve labour utilization through improved work processes used to schedule work.  Provide IT support systems to effectively bundle, manage and schedule work.  Target first-quartile costs when compared with similar service organizations.  Enhance product definitions, value and pricing.  Streamline administrative processes.  Seek improvements to the collective agreement that enables strategies.	Labour Utilization (%)  Hourly Charge-Out Rate (\$)	73.9 89	84 95	85 90			



# Performance at a glance Sustainability Scorecard

# Powerex

			Service Plan Results			
Long-term Goals	Strategies	Service Plan Measures	03/04 Actual	04/05 Target	04/05 Actual	Results
Enablers	Energy trading to optimize the value of the surplus BC Hydro capability.  Increase trading within the Western Electricity Coordination Council (WECC) and in other select areas of North America.  Increase cross commodity transactions between power and natural gas in western markets.  Improve operational effectiveness and reduce operational risk through strong business processes and IT infrastructure.  Transact business with a strong code of ethics and a high degree of integrity.  Support teamwork to promote corporate over individual achievement.	Transactions per Employee (number)	N/A	660	936	n



L.I. (Larry) Bell

The 2005 BC Hydro Annual Report was prepared under my direction in accordance with the *Budget Transparency and Accountability Act* and in accordance with the Global Reporting Initiative 2002 Guidelines. I am accountable for the contents of this report, including the selection of performance measures and targets and how the results have been reported. The information presented reflects the actual performance of BC Hydro for the 12 months ended March 31, 2005. All significant decisions, events and identified risks have been considered in preparing this report.

The information presented is prepared in accordance with the B.C. Reporting Principles and represents a comprehensive picture of our actual performance in relation to our Service Plan.

Overall, the 2005 fiscal year was another excellent one for BC Hydro. Looking back on the expectations set out in our 2004 Service Plan, I am proud to say that we met (3) or exceeded (4) seven of our nine corporate performance measure targets. Of particular note in this area was the outstanding result – 90 per cent – for customer satisfaction (exceeding the target of 84 per cent), our financial accomplishment of \$402 million in net income (even in the face of lower than average water levels) and a continued significant improvement in overall employee safety. The latter achievement was tempered, however, by the tragic employee fatality that occurred on Vancouver Island. This incident further renewed our commitment to both employee and public safety.

We had a number of key accomplishments and challenges throughout the year. Key accomplishments include successfully completing our first revenue requirements process in over 10 years before the British Columbia Utilities Commission. The result – a 4.85 per cent rate increase – provided the funds necessary to continue operating our business in the most efficient way for our customers, while still keeping their electricity rates among the lowest in North America. Our private sector power acquisition program also continued to grow, with four new green independent power producers projects coming on line and the announcement of 1,000 gigawatt hour "all resource" calls for both 2005 and 2006. We began the 2005 Integrated Electricity Planning process, with an expanded stakeholder engagement process across the province. We also developed a new corporate purpose and 15 new long-term goals to help guide our company into the future.

In terms of challenges, identifying future resources options continued to lead the way. We launched our 2005 Integrated Electricity Plan with a comprehensive stakeholder engagement process across the province. Early in the fiscal year, we also undertook a process to investigate the potential of acquiring interest in the generating assets of CBT Energy Inc. and the Columbia Power Corporation (CPC), something that was later abandoned when CBT Energy's parent company, The Columbia Basin Trust, withdrew its support for the initiative.

As always, external industry and market developments continued to impact our business last year. Leading the way was a continued low water situation in the Pacific Northwest, which significantly limited the amount of energy available in the region. At the same time, rising oil and gas prices impacted thermal resources throughout North America. And uncertainty, related to how all parties were going to respond to the Kyoto Protocol, continued to raise questions about the potential costs of greenhouse gas emissions. The impact of rising oil and gas prices and Kyoto was naturally mitigated somewhat by the fact that we are primarily a hydroelectric utility, while the low water situation was partially offset by the fact that the water situation in the province was in much better shape than other parts of the Pacific Northwest.



# Letter from the Chair to the Minister

We also faced – and worked to manage – our share of risks and uncertainties this past year. I previously mentioned those related to safety, both in terms of the success and the challenge. We dealt with the annual risks related to reliability of supply: making sure we have enough electricity, and getting it to our customers. On the reliability of supply, we completed a second straight year of significant electricity imports to help offset previous low water conditions in the province, thus assuring we had enough to meet customers' needs. And while our overall reliability numbers did not meet our admittedly optimistic goal, the specific customer-based reliability project we initiated did result in key improvements in the most problematic feeders.

On the financial side, we were able to overcome rising energy costs and high energy imports to still have a strong year, mostly due to the continued success of our power marketing subsidiary, Powerex. And, on the environmental and social side, we continued to mitigate potential risks and met our responsibilities by focusing efforts on our relationships with First Nations, finalizing Water Use Plans with interested parties across the province and exploring the different options and implications for dealing with the Kyoto Protocol.

Throughout all of our work this year, we kept in mind the implementation of the provincial government's Energy Plan. I am proud to say that we have now successfully completed 19 of the 21 policy elements related to BC Hydro, with the remaining two fully underway. Leading the way here was the work that allowed the British Columbia Transmission Corporation to become a fully independent and separate Crown corporation by the April 1, 2005 deadline.

This year, as has been the case in the past, BC Hydro continued to face its challenges and opportunities from a triple bottom line perspective. This concept of sustainability is captured in our new purpose – reliable power, at low cost, for generations – and it plays the lead role in the decisions we make every day. By continuing with this long-term focus, I believe BC Hydro will remain not only a leading Crown corporation in the province, but will help us become a world leader as well.



# Message from the President and CEO

R.G. (Bob) Elton

Traditionally, our customers have had high expectations for BC Hydro in terms of performance – environmentally, socially and economically. This fiscal year we set that bar higher ourselves by formalizing a new purpose and a series of long-term goals that will influence our business moving forward. Our new purpose, "Reliable power, at low cost, for generations," not only resonates with employees, but also solidly confirms our commitment to our customers.

Broken down, we know our customers value reliability and we want to be able to deliver that value. To this end, we intend to ensure that we keep reliability at today's levels: to preserve our heritage and target our investments so that our maintenance and capital will be spent more on the places in the province where reliability most needs to be. In terms of assuring low cost, we will be fiscally prudent in how we operate and strive to maintain some of the lowest electricity rates in North America to maintain our competitive advantage. But low cost cannot always translate to "least" cost, either in terms of operations, rates or even reliability. We have to balance cost with reliability and our impacts on society and the environment. For generations is the realization that BC Hydro cannot make short-term decisions that don't consider the long-term effects on the environment, on communities, on BC Hydro's assets and on the business, and reflects our desire to be successful over the long term. In essence, it is our commitment to sustainability.

Our 15 long-term goals, outlined in further detail within this report, will be nothing short of a challenge for BC Hydro to achieve, as in many cases the goals are building on an already proud record of success. Employees have asked, "How do we determine what our next steps will be?"

While each of our goals is equal in importance, I would like to examine three in more detail to explain our thinking behind them. Take, for example, our goal of having no net incremental impact on the environment. This is the first time I know of that a Canadian company has tried do that. First we have to know and understand the impact we have on the environment. The next challenge will be to not increase it, to set targets for impact reduction over the next few years and put strategies in place to measure successes.

To achieve these results, the measures will be kept simple – reducing the amount of paper we use or the number of trees saved as a result. Encouraging employees to take ownership of their own waste reduction projects. For an overall impact, we will measure our ecological footprint – a measure of our draw on the earth's resources measured in hectares. Regardless of the means, the most important thing is that we make progress.

Reliability of supply, which will lead us towards electrical self-sufficiency, is our goal to ensure that BC Hydro will have sufficient generation capability in B.C. to meet its load obligations in any given year. Short-term market purchases will still be made when the economics are favourable. This goal will ensure reliability of supply in B.C. is not dependent on policies and strategies of other jurisdictions. We have laid out both short- and long-term strategies in order to accomplish this goal, ranging from progressing on two energy calls to maintain resource adequacy within 10 years to implementing the Integrated Electricity Plan and related long-term actions to help assure future needs are met.

A key challenge for the reliability of supply is building understanding with external stakeholders, customers, First Nations, suppliers and the British Columbia Utilities Commission as to the definition of this, and the time and way in which we achieve this goal. We plan to do this in an integrated way, through planning, which includes broad engagement and representation of our plans through the regulatory process.

And our goal to reduce electricity intensity, or the amount of electricity consumed per unit/per capita by a customer, is of particular importance as it is a key driver of electrical demand and growth. With the introduction of new personal technologies this electricity intensity is forecast to increase year over year. BC Hydro has placed a renewed emphasis on energy efficiency with as much as 35 to 40 per cent





# Message from the President and CEO

of growth over the next 10 years planned to be met through demand-side management. To achieve this goal, our target is an overall 15 to 20 per cent reduction in personal energy use by implementing programs that encourage behavioural changes to help customers in making energy efficiency a way of life and a way of doing business.

Simply, the road ahead will be challenging, but not without reward, as our destination is clear. Our executive and our employees are committed to our new purpose of providing "Reliable power, at low cost, for generations" and it also marks a promise to deliver and surpass customer expectations.



#### **MANDATE**

As directed by the *Hydro and Power*Authority Act, BC Hydro's mandate is to generate, manufacture, distribute and sell power, upgrade its power sites, and to purchase power from, or sell power to, a firm or person. This mandate is fulfilled within the context of the corporate purpose outlined below.

BC Hydro is the largest electric utility in B.C., serving more than 1.6 million customers. Our primary business activities are the generation and distribution of electricity. Between 43,000 and 54,000 gigawatt hours (GWh) of electricity is generated annually from our world-class, integrated hydroelectric and thermal generating system. Our generation system has a total installed capacity of 11,311 megawatts (MW). About 90 per cent of this generation is based on clean, renewable hydroelectricity, enabling BC Hydro to offer customers some of the lowest electricity rates in the world.

Electricity is delivered to customers through an interconnected system of over 73,000 kilometres of publicly owned transmission and distribution lines. The transmission assets are owned by BC Hydro; the management and operation of the transmission system is the responsibility of the British Columbia Transmission Corporation (BCTC).

### 500 kV Transmission System and Major Generating Stations



BC Hydro has corporate offices in Vancouver (Dunsmuir) and Burnaby (Edmonds), and through regional offices has a presence in more than 50 communities throughout the province.

BC Hydro's domestic market area is most of the province of British Columbia. Powerex, its energy marketing subsidiary, focuses its activity on customers in Alberta, Ontario and many parts of the United States.

### **CORE VALUES**

BC Hydro believes the four core values below to be essential to our success. Employee performance is measured and rewarded in accordance with these values.

- Accountability we take responsibility for our action
- Integrity we are fair and honest, open and straightforward
- Service we seek solutions and build relationships
- Teamwork we work together to achieve results

In conjunction with these core values, BC Hydro's Employee Code of Conduct provides clear guidelines to all directors and employees on the standards of conduct expected of them in all business relationships.



# Business Overview New Purpose and Long-Term Goals

During the year, BC Hydro adopted a new purpose that provides a clearer picture of who we are as a company and what we plan to deliver over the long term.

# Reliable power, at low cost, for generations

Broken down, the words have additional meaning:

**Reliable power** is the foundation of BC Hydro's commitment to our customers. We will have the energy available and deliver it when it is needed. Reliability also speaks to our goal of making B.C. self-sufficient in electricity to meet domestic needs.

**Low cost** reflects the value we will provide back to our shareholder, the provincial government, and our customers. We will be fiscally prudent in how we operate and strive to maintain some of the lowest electricity rates in North America.

**For Generations** confirms our commitment to sustainability in managing our business. This means looking beyond potential short-term benefits and thinking for the long term in all of the decisions that can impact our environmental, social and financial bottom lines.

In concert with our new purpose, we have adopted 15 bold, long-term goals (see Appendix). These goals, grouped into six key categories, will guide us in meeting our new purpose over the next 20 years.



#### INTERNAL BUSINESS STRUCTURE

BC Hydro has four Lines of Business and a corporate group, two subsidiaries and two key suppliers. These groups and their respective employee numbers are shown in the accompanying chart.



**Generation** manages and operates BC Hydro's generation assets to optimize their value for the benefit of the company, customers and the shareholder. Generation manages the investment strategies related to generation assets and Water Use Planning. Generation assets include 42 dams,79 generating units at 31 hydroelectric facilities and nine units at three thermal generating plants.

**Distribution** acquires energy through demand-side and supply-side options, delivers it safely and reliably to our customers, and provides extension and connection services. Distribution manages 56,400 kilometres of overhead, underground and submarine distribution lines, 876,000 poles and 344,000 transformers, and substation distribution assets.

**Engineering** provides project management, maintenance, emergency response, design, environmental support, contracts and construction management services to BC Hydro, British Columbia Transmission Corporation (BCTC) and to some external clients.

**Field Services** provides services such as emergency response and restoration and maintenance services to BC Hydro and BCTC in more than 50 communities in the province. Field Services also manages the vehicle fleet.

Corporate services include: the office of the Chief Financial Officer (finance and regulatory functions); Corporate Resources (legal, corporate communications and public affairs, properties and human resources); Organizational Development, Stakeholder Engagement and Sustainability; Business Partnerships; and Risk Management. These groups provide services to the overall organization.

## **SUBSIDIARIES**

**Powerex**, the energy marketing arm of BC Hydro, is a leading marketer of wholesale physical electricity products and services in western Canada and the United States, and a growing player in other select markets across North America. Powerex is responsible for creating economic value for BC Hydro and the province by:

- Optimizing the unused capability of BC Hydro's generation system for trade, including purchasing energy for trade and resale using the hydroelectric system;
- Energy trading in the Western Electricity
   Coordinating Council and other regions; and
- Optimizing the purchase and sale of electricity and natural gas in relation to BC Hydro's capabilities and domestic requirements.

Powertech Labs Inc. is BC Hydro's research and engineering technology subsidiary, serving B.C., Canadian and international clients. Powertech's basic business is innovation, solving technical problems, equipment testing and certification. Powertech also develops and deploys software solutions, investigates alternate energy generation, performs electrical, materials and metallurgy testing, and provides chemistry analysis for the energy sector.



# BRITISH COLUMBIA TRANSMISSION CORPORATION

The separation of BC Hydro and British Columbia Transmission Corporation (BCTC) was part of the Provincial Government's Energy Plan. Among other objectives, the plan provides for open and non-discriminatory access to B.C.'s electricity transmission system for all power providers, including BC Hydro. BC Hydro retains ownership of the transmission assets, but their management, operation and maintenance is the responsibility of BCTC.

Although BCTC is a separate Crown corporation, BCTC and BC Hydro work together through service level agreements to ensure the system's reliability. The separation of BCTC from BC Hydro was mandated by the Provincial Government's *Transmission Corporation Act* that came into force in July 2003. Effective April 1, 2005, BCTC is a fully independent entity, operating under its own tariff. Its relationship with BC Hydro is defined by the tariff, the Master Agreement and the Key Agreements. These agreements are supported by several specific agreements, and include:

- Service Level Agreements, relating to provision of specific services such as Engineering, Field Services, and Distribution Operations;
- Protocol Agreements, covering First Nations issues, Intellectual and Real Property, and Workplace Safety; and
- Other Agreements, including Apprentice Training and General Assignment and Assumptions.

The drafting and negotiating of these agreements has been achieved by continuous and dedicated effort by BCTC and BC Hydro staff over the past year, and the agreements were signed shortly after the end of the fiscal year.

Although the full separation of the two corporations only came into effect on April 1, 2005, BCTC's operations have been largely separate from those of BC Hydro for the past year. However, its financial results for the last year are consolidated with those of BC Hydro, as provided in this report. BCTC also prepares and publishes its own Service Plans and Annual Reports.

### **CUSTOMERS**

BC Hydro operations serve a diverse domestic customer base comprising residential, commercial and industrial customers. About 88 per cent of customers are residential, accounting for approximately 38 per cent of our domestic revenues. About 11 per cent of customers are commercial or light industrial, accounting for 36 per cent of domestic revenues. Large industrial customers represent less than one per cent of customers, but account for about 21 per cent of domestic revenue.

## **ENABLING LEGISLATION**

Two key provincial legislative statutes enable BC Hydro's operations. Our mandate is provided for under the *Hydro and Power Authority Act*. This Act created BC Hydro and establishes its general powers and governance.

The other piece of legislation is the *Utilities Commission Act*. This Act creates the British Columbia Utilities Commission (BCUC) and establishes the framework for regulation of public utilities. The BCUC is an independent regulatory agency of the Provincial Government, operating under and administering the *Utilities Commission Act*. The BCUC's primary responsibility is the regulation of the energy utilities under its jurisdiction to ensure that the rates charged for energy are fair, just and reasonable, and that utility operations provide safe, adequate and secure service to its customers.



### PROVINCIAL PUBLIC POLICY

BC Hydro is a commercial, provincial Crown corporation and has a role in implementing provincial public policy. This was seen in the past year with the continued implementation of the Provincial Government's Energy Plan. The plan has four cornerstones: low electricity rates and public ownership of BC Hydro; secure, reliable supply; more private sector opportunities for new energy supply; and environmental responsibility and no nuclear power sources. The Energy Plan contains 21 direct policy action items for BC Hydro. Nineteen have been completed and the remaining two are underway: choice of electricity supplier by large customers and new rate structures to encourage energy efficiency.

## **MANAGEMENT SYSTEMS**

A variety of integrated management systems guide the environmental, social and financial aspects of our business. These include the Environmental Management System, the Safety Management System and the Risk Management System. Together, these systems enable us to rigorously manage the environmental, social and financial aspects of our business in a proactive and integrated manner.



# Report on performance

BC Hydro's Annual Report is designed to address the Provincial Government's *Budget Transparency and Accountability Act* (BTAA) requirement to report against the performance targets set out in our Annual Service Plan. In addition, we also report on various activities that align with the Global Reporting Initiative 2002 Guidelines for Triple Bottom Line reporting.

The Sustainability Scorecards containing February 2004 Service Plan measures are located on pages 3 – 8. BC Hydro has committed to meet or exceed the goals in the Service Plan, and has developed strategies and set performance targets as the baseline against which to measure results. The Lines of Business (LoBs) and subsidiaries are responsible for performance within their business areas, and are accountable to BC Hydro's overall direction.

### **LONG-TERM GOALS**

As referenced earlier in this report, BC Hydro's new purpose is to provide reliable power, at low cost, for generations. This purpose is supported with 15 longterm goals developed in fiscal 2005 and forms the basis for our Service Plans going forward.

This year's Report on Performance is structured around the six new long-term goal categories: Customer, Employees, Social, Environment, Financial and Enablers. The 15 long-term goals (see Appendix) encompassed within these categories provide strategic direction for the management of our business in environmentally, socially and financially responsible ways over the next 20 years. Specific performance measures and targets will be developed during the current fiscal year for each of the goals. All measures will be results-based where possible to enable accurate tracking of our performance. Our performance in meeting these long-term goals will be tracked in our quarterly and annual reports.

### **MEASURES ASSURANCE PROGRAM**

During fiscal 2004/2005, BC Hydro's Audit Services group developed assurance standards for performance measures. Internal audits were conducted for three performance measures using these standards. These measures were: Cost per Megawatt Hour; Capital, Operating, Maintenance and Administration Cost per Customer; and New Energy from Clean Energy. The results showed that there were no major issues to be addressed. All internal audits are reviewed by BC Hydro's Audit and Risk Management Committee of the Board.

# **BENCHMARKING HIGHLIGHTS**

BC Hydro participated again in the Haddon Jackson Associates (HJA) benchmarking program. From 1999 to 2004, 93 per cent of our installed capacity has been benchmarked by HJA. These studies showed that BC Hydro's major generating stations benchmark in the first or second quartile of comparable facilities in North America in terms of cost and performance. However, the studies also showed that in past years we had been underinvesting in our facilities, which will impact future performance. In recent years, our facilities investment level has been increasing to ensure that performance is maintained or improved.



BC Hydro has four customer-related long-term goals:

- The Reliability (Customer) goal is to achieve best-in-class reliability by customer segment.
- The Reliability (Supply) goal is to become self-sufficient in electricity (energy and capacity) in B.C. for meeting all domestic needs.
- The Customer Satisfaction goal is to lead other companies in offering extraordinary value and service.
- The Remote Community Electrification goal is to provide appropriate electric service to all remote communities on an equitable basis.

Our customers are of primary importance to us. We strive to operate and provide world-class reliability and service that satisfies customers, and provides electrical service to remote communities on an equitable basis. To accomplish this, we will identify and respond to customers' needs, recognizing that various customer groups have different reliability needs. We will give customers greater choice for supply, and invest capital and maintenance dollars where they are needed most.

British Columbians have been well served by our low-cost, hydroelectric electricity system. We will continue to build on our legacy of electricity self-sufficiency, by continuing to add supply to satisfy 100 per cent of the province's power needs. Achieving energy self-sufficiency will minimize price volatility and open up economic opportunities for B.C.'s Independent Power Producers. The following highlights reflect the challenges, initiatives and accomplishments during fiscal 2005 in striving to meet our customer-related goals.

### **CUSTOMER CARE**

## **Customer-Based Reliability**

One of the ways we will improve reliability is by anticipating the needs of existing and future customers and incorporating them into our investment strategies. A Customer-Based Reliability (CBR) strategy has been developed to tailor reliability targets for specific customer segments by incorporating customer expectations in asset spending decisions. The first phase of the strategy, implemented in fiscal 2005, focuses on feeder circuits deemed deficient in meeting customer needs and expectations. A feeder is a circuit that carries a large block of power to a point at which it is broken into smaller circuits. In the context of the CBR strategy, the focus is on power reliability in the customer's area and the feeder circuits can provide good indications of patterns of electricity consumption. The second phase of the strategy will develop a more robust process directly aligned with the results from the Customer Plan, such as the inclusion of customer values for reliability gathered through a customer survey.

The *Customer Plan* uses customer value research to provide us with insights to increase customer value and service excellence. It provides a road map for managing customer value across all customer points of contact. As a result of this initiative, BC Hydro is focusing on service offerings of particularly high importance to customers and where satisfaction is lower compared with other aspects.

# Improving the Measures of Reliability

Standard industry measures of reliability, such as Average System Availability Index (ASAI) and Customer Average Interruption Duration Index (CAIDI), are system measures regarding the system's overall performance for power availability and duration respectively. They do not serve the purpose of informing customers about their reliability experience in terms of interruption frequency or duration. To enable customers to better understand and articulate their needs for reliable service, a new approach was developed for measuring reliability performance – one that takes customers' needs and expectations into account.



As a result, two new measures, *Customers Experiencing Multiple Interruptions* (CEMI) and *Customers Experiencing Longest Interruption Duration* (CELID), will be implemented in fiscal 2006 to support the long-term goal of customer reliability. They will improve customer understanding of reliability, as the data can be broken down to lower levels of detail (e.g., from system overall to region, area, district, feeder or customer) or aggregated to a high level of detail. CEMI and CELID will be easy for customers to understand, as they measure the proportion of customers who have experienced multiple interruptions and their longest interruption duration experience. These new measures will improve customers' understanding of reliability performance and will support BC Hydro's alignment of investment with customer needs.

# **Major Storms Impact Reliability**

Major storms are a fact of life in B.C. and provide significant challenges for BC Hydro in meeting reliability targets. We cannot change the fact that we have storms, or their impacts, so instead we focus on what we can control – how quickly and efficiently we mobilize a response and provide clear and timely information to our customers. Vancouver Island was hit by two of the largest storms this fiscal year. On April 27, 2004, customers throughout B.C. were affected by a major windstorm, with one-third of the outages and damage to midand north Vancouver Island. From January 7 to 9, 2005, major snowfall to south and mid-Vancouver Island resulted in the worst storm impact to our customers since 2001. Tens of thousands of customers, many in the Duncan, Nanaimo, and the Gulf Islands areas, experienced multiple outages during the three-day period. As BC Hydro crews and contractors worked to restore power, the continuous heavy snowfall would topple trees and snap branches onto the power lines again. Crews were mobilized from the north Island and Lower Mainland to assist with the difficult task of restoring power in icy and wet conditions, which restricted access to certain areas. In particular, some of the power lines on the Gulf Islands could not be reached and resulted in extended power outages of over 48 hours to many customers.

# Improving Reliability and Protecting Salmon Habitat

In fiscal 2005 BC Hydro replaced the aging 25 kV distribution line crossing that serves the north shore of Shuswap Lake to increase reliability for customers in that area. These underwater cables cross through highly sensitive sockeye spawning habitat in proximity to the Adams River and Roderick Haig-Brown Provincial Park. Following extensive planning with the Department of Fisheries and Oceans, the old cables were removed and new cables laid into the same trench to minimize beach area disturbance and impacts to spawning habitat. Special precautions were taken to contain the movement of suspended silt in the water while trenching the underwater sections. The project was completed without incident and will be monitored to ensure that no adverse impact to sockeye spawning has occurred.



## **Benchmarking our Reliability Performance**

BC Hydro participates in the PA Consulting Group's Transmission & Distribution Benchmarking Study each year to assess our Distribution performance among leading North American utilities. BC Hydro also compares our performance against a composite of participating utilities in the Canadian Electricity Association. These studies have shown that we are a low-cost, customer-focused service provider with many of the industry's best practices in place. The wires business in our Distribution Line of Business has been ranked consistently in the top quartile in terms of distribution expenditures per customer, and our customers have continued to express a high level of satisfaction with the reliability of the electricity we provide. However, our reliability performance does not compare favourably with that of other utilities, mainly due to BC Hydro's vast service territory, terrain and vegetation challenges. Equipment failures, due to aging infrastructure and increasing customer density, also contribute to the declining performance. Continued effort and investment are required to improve reliability performance while maintaining costs well within the top quartile.

# Average Number of Forced Outages/Unit

By Asset Class

	02/03		03	/04	04/05		05/06	
	Target	Actual	Target	Actual	Target	Actual	Target	Actual
Large	N/A		2.4	2.76	2.2	2.26	2.1	
Strategic	N	N/A		3.40	3.6	3.04	3.5	
Available Energy	N/A		4.8	3.87	4.8	2.93	4.8	
Thermal	N/A		3.0	N/A	3.0	4.33	3.0	

### **Definition**

A large plant is a station with capacity greater than 200 MW (38 units). Strategic plants include multiple plants on a river system, all Vancouver Island generating stations, and generating stations required for ancillary services (25 units). Available energy stations are all stations that are not classed as large or strategic (16 units). Thermal plants (9 units).

A forced outage is the count of generating unit outages due to equipment failure or other unplanned events. The intent of this measure is to track the reliability of a generating unit to produce electricity for as long as called upon to do so. Reliability is improved by reducing the number and duration of forced outages.

### **Variance Explanation**

Average Number of Forced Outages is better than target. While it is still too early to establish a definitive correlation, the improved plant performance may be due to implementation of reliability centred maintenance practices beginning in 2000/2001.

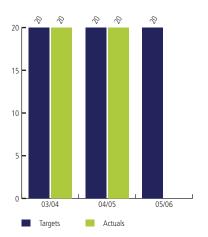
### **Benchmark Comparison**

Exact comparable benchmark data is not available. However, a recent summary of all benchmarking conducted for BC Hydro by Haddon Jackson and Associates since 1999 showed that all major generating stations performed in the top and upper-mid quartiles.



### **Asset Health Risk Index**

Percentage



### **Definition**

Asset Health Risk Index is the percentage of Distribution assets rated in fair or poor condition through an annual assessment of asset health.

## **Variance Explanation**

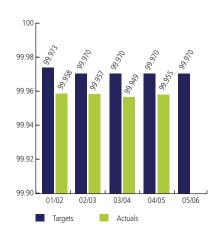
Achieved target as increased maintenance spending has helped to prevent asset health from declining.

# **Benchmark Comparisons**

No benchmark data available.

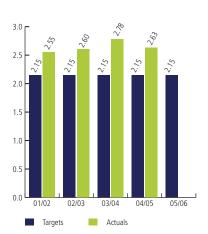
# Reliability: Average System Availability Index (ASAI)

Percentage



# Reliability: Customer Average Interruption Duration Index (CAIDI)

Hours



### Definition

Reliability is a combination of Average System Availability Index (ASAI) and Customer Average Interruption Duration Index (CAIDI). ASAI is the percentage of time the power system is available. CAIDI is the average number of hours per interruption. These indices are electric utility industry standards. CAIDI and ASAI are reported on a rolling 12-month basis.

# **Variance Explanation**

Reliability is worse than target, due to a major snowstorm that hit Vancouver Island on January 7 to 11, 2005, causing serious damage to the distribution system and resulting in multiple outages to more than 100,000 customers. The ASAI result means that over the 12-month period, the system was unavailable for less than four hours.

# **Benchmark Comparisons**

BC Hydro is in the second quartile of Canadian and U.S. utilities for ASAI and third quartile for CAIDI.



### POWER PLANNING AND ACQUISITION

BC Hydro relies on a variety of tools and approaches to guide our forecasting, energy planning, acquisition and portfolio management activities. These approaches take a long-term view to ensure that future implications are considered in all decisions made. As a public utility, we are obligated to meet domestic customer demand. We review the demand-supply outlook regularly to ensure that we can meet that responsibility. Some examples of related activities are included below

# Ensuring Long-term Supply: Integrated Electricity Plan

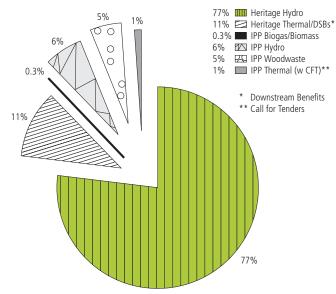
One of the major tools we use in planning how to meet B.C.'s growing demand for electricity is the Integrated Electricity Plan (IEP). We consult stakeholders extensively during the planning process to help come up with a preferred long-term energy portfolio. The 2004 IEP – which included an action plan for 2005 to 2008 – was completed on March 31, 2004 so that it could be available as a contextual document for the 2004 Revenue Requirements Application hearing. Elements of the action plan were approved by the BCUC, confirming the prudence of our planning process. BC Hydro will publish another IEP in 2005 and every two years thereafter.

The 2005 IEP is well underway. It has an increased focus on First Nations and stakeholder engagement. The IEP's objective is to develop a preferred portfolio of new resources to meet the energy needs of ratepayers in a low-cost and reliable manner. The Resource Expenditure and Acquisition Plan (REAP) which sets out short-term actions in support of the long term, will be filed annually with the BCUC for its review and approval. The 2005 REAP was filed in March 2005 and will be the subject of a BCUC hearing process in the summer of 2005.

# **Open Calls for Power**

Open calls for energy are used to acquire firm power from a full range of potential resources built by the private sector. In 2004 BC Hydro proposed and received approval from the BCUC for an open call for 400 GWh of new power (enough power for approximately 40,000 homes). Upon reviewing the need, BC Hydro concluded that the key uncertainties driving the call had increased and that the proposed call size should be increased to manage supply uncertainties. As a result, BC Hydro increased the call target to 1,000 GWh (an equivalent amount of electricity for approximately 100,000 homes) and resubmitted the 2005 Open Call with the BCUC for approval as part of the 2005 REAP application. BC Hydro has also issued the proposed call elements and requested input from First Nations and stakeholders. After reviewing the input, BC Hydro will issue another, more detailed, set of documents for comment to First Nations and stakeholders in the summer of 2005. The 2005 Open Call will be issued in the fall of 2005, after the call has been approved by the BCUC, with private-sector tenders being required by the end of 2005. BC Hydro will announce intentions to issue another open call of similar size in the summer of 2006. BC Hydro's decision to abandon the Duke Point Power Project means the terms of the call may need to be reconsidered with respect to quantity, timing and other conditions.

# Current Energy Portfolio in Service





## **Duke Point Power Project**

Providing additional generating capacity on Vancouver Island remains a top priority, as most of the Island's electricity is provided from the mainland via aging underwater cables that are nearing the end of their lifespan. On February 17, 2005, the BCUC approved the Electricity Purchase Agreement (EPA) between BC Hydro and Duke Point Power Limited Partnership (DPP) for a 252 MW gas-fired facility near Nanaimo. Subsequent to the approval, two intervenors in the EPA review filed an application to the B.C. Court of Appeal for leave to appeal the BCUC decision. On April 12 the application was denied. Intervenors, however, filed a further application for consideration, which was heard on June 3, 2005. On June 14, 2005 the B.C. Court of Appeal rendered a decision in favour of an appeal proceeding. On June 17, 2005 BC Hydro announced it was abandoning the Duke Point Power Project because the risks were now too great that it would not be ready in time.

### **CUSTOMER SATISFACTION**

In pursuing the goal of leading other companies in offering extraordinary value and service to customers, we are performing well. BC Hydro continues to enjoy high satisfaction ratings from our customers on service offerings. BC Hydro ranks in the first quartile among Canadian utilities in customer service (Synovate Research, *National Benchmark Survey*, October 2004 and March 2005).

BC Hydro outsourced a number of our backoffice and customer-related functions to Accenture Business Services for Utilities (Accenture) in 2003. We work closely with them on understanding customer expectations and continue to set the service policies and performance levels required to maintain our high levels of customer satisfaction. The transition to a new Customer Information System and resourcing issues proved challenging in the past year. Jointly developed action plans mitigated these concerns and Accenture met or exceeded all customer service performance targets.

To provide additional value to our customers, we are focusing on service offerings of high importance to customers and in areas where their satisfaction is lower. New customer insights are leading us to:

- better communicate our plans for a reliable supply of electricity in the future and to engage interested stakeholders in the integrated electricity planning process
- improve the information provided to customers in the event of outages so that customers have a better sense of the estimated duration and can plan accordingly
- refocus on our public safety education program
- work closely with Accenture to ensure all aspects of telephone and billing service meet the needs and expectations of customers

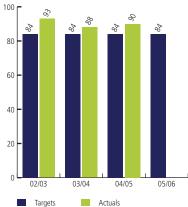


# **Net Metering Adds Value for Customers**

We are also adding value to our service offerings to increase customer satisfaction. A Net Metering program and Tariff was implemented in the spring of 2004. Residential and commercial customers who participate in this program may connect a small generating unit using a "BC Clean" energy source such as wind, solar or micro hydro to BC Hydro's distribution system. Currently, seven customers – five using photovoltaic (solar) generation and two using small/micro hydro – are receiving credits to their accounts when their own generation facilities produce more power than they consume. These customers can use such credits against future consumption charges and BC Hydro receives an additional source of clean energy. This initial "take up" of the Net Metering program was about as expected, given that it is a new initiative.

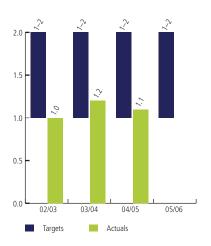
### **Customer Satisfaction Rating**

Percentage



# Sustaining Capital Ratio

Percentage



#### Definition

Customer Satisfaction Rating is a composite indicator. Thirty per cent of the measure comes from a survey using all customers as the population from which to draw a random sample. The other 70 per cent comes from transactional surveys with customers who have had a service interaction with BC Hydro.

## **Variance Explanation**

Customer Satisfaction remained above target, due to improved levels of satisfaction among top-tier business customers (those with electricity purchases greater than \$200,000 per year), where overall satisfaction increased from 83% to 93% between March 2004 and March 2005. In addition, satisfaction with Key Account Management and call centre transactions continued be high and contributed to exceeding the overall target.

### **Benchmark Comparisons**

The targets correspond closely to first quartile performance in the Ipsos-Reid National Omnibus Survey that BC Hydro is using as its proxy benchmark.

### Definition

Sustaining Capital Ratio is the sustaining capital expenditures as a percentage ratio of replacement value of capital assets. It is a predictive measure of service performance. Its purpose is to indicate BC Hydro's future ability to maintain high system reliability by ensuring business-sustaining investment to maintain the health of its assets.

### **Variance Explanation**

The Sustaining Capital Ratio came in at the lower end of the target range due to delayed spending on projects.

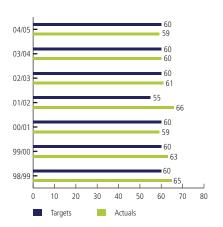
# **Benchmark Comparisons**

No benchmark data available.



# Public Opinion Survey Respondents with Generally Favourable Opinion of BC Hydro

Percentage

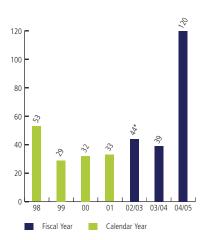


The purpose of the Public Opinion measure is to track the public's overall impression of BC Hydro to determine to what extent we have public consent to operate. The measure tracks the results of the survey question "Would you say that your general attitude towards BC Hydro is very favourable, somewhat favourable, somewhat unfavourable, very unfavourable or are you indifferent towards them?" Poll results sum the "very favourable" and "somewhat favourable" categories.

Public opinion of BC Hydro has been very stable over the past several years, with six in 10 British Columbians continuing to feel favourably towards the corporation. The actual result of 59% is well within the margin of error of the 60% target.

# Public Complaints/Grievances Handled by the B.C. Utilities Commission

Number



Tally before 2003/2004 includes both formal written complaints submitted to the B.C. Utilities Commission (BCUC) and complaints dealt with informally by telephone that did not escalate to the written complaint stage. Tally for 2003/2004 and 2004/2005 includes formal written complaints only. The increase in complaints for 2004/2005 compared with 2003/2004 was primarily attributed to increased enforcement of security deposit requirements due to the new NorthStar billing system (65) and various billing issues related, for example, to estimated meter readings, disputed electrical charges and back-billing provisions (41).

\*Includes all of 2002 and first three months of 2003. The time-adjusted total for a 12-month period is estimated to be 35.

## REMOTE COMMUNITY ELECTRIFICATION

BC Hydro believes that it is important to ensure that remote communities in B.C. not currently served by us have the opportunity to receive electric service. In pursuing the remote community electrification goal, in fiscal 2005, BC Hydro began discussions to assume responsibility for the provision of electrical service and customer care for two First Nations communities in central B.C., the Kwadacha and Tsay Keh Dene Nations. This initiative involved comprehensive dialogue, negotiations and participation with key First Nations and stakeholder groups, Indian and Northern Affairs Canada, and each community's current service provider. Key issues, concerns and values were identified and addressed in a respectful and considered way. The initiative has culminated in the successful signing of an agreement whereby BC Hydro will become the service provider to these communities starting in fiscal 2006. It is anticipated that the knowledge gained and skills developed in this initiative will provide key inputs into BC Hydro's implementation of the goal of Remote Community Electrification.



BC Hydro has three employee-related long-term goals:

- The Workplace goal is to be among the Top 10 Best Employers in Canada.
- The Teamwork goal is for all employees to work collaboratively on one team to the benefit of all stakeholders.
- The Safety goal is to provide the safest work environment compared with the best performers in any industry. None of our employees will experience a serious safety injury.

BC Hydro seeks to build both a skilled workforce that mirrors the diversity of B.C. and a culture that is performance-based and service oriented. Employing a teamwork model, we strive to ensure that all employees clearly understand how their work individually and as a team contributes to our business success.

In addition, we want to provide a safe, injury-free workplace and ensure safety for the public. This will be achieved through injury prevention and implementing the right procedures and policies. Our three employee-related goals are interdependent; as we work toward becoming a Top 10 Best Employer, we also need a working environment built on the solid foundation of teamwork and safety. With a focus on doing the basics well, this year our employee-related priorities included initiatives to:

- encourage employee commitment by setting clear expectations and providing meaningful feedback
- improve the delivery of benefits, pensions and general Human Resources services
- increase two-way employee communication in alignment with our purpose

Like other employers, BC Hydro has an aging workforce. We have developed sophisticated modelling tools to predict retirement uptake. This year 626 employees were eligible for retirement. Consistent with our history, about 24 per cent have actually left the company.

We have also identified those areas where we will have critical skills shortages. BC Hydro hires apprentices and trainees in advance of projected retirements so they will have completed their training and be ready for deployment in the workforce as employees retire. Since 2000/2001, we have hired 364 apprentices and trainees under our Strategic Workforce Planning initiative, at a cost of \$36.7 million. Over the next two years we will be hiring and training another 139 trainees at an estimated cost of \$22 million.

Our Strategic Workforce Planning initiative is not expected to meet all of the vacancies in critical skill occupations. We will be supplementing these positions with market hiring. We will be continuing to enhance our recruitment and selection processes to make sure we get the best possible candidates. Our most significant initiative in this area will be the implementation of a computerized Candidate Management System. This system will help us identify and track the best qualified candidates available.

We will ingrain our performance culture with new tools and initiatives for all employees, including continuing to develop employee understanding of job expectations and strengthening the link between compensation and employee performance. We will help employees understand the company's goals, how their own role fits into the whole organization and how as individuals they contribute to the team at BC Hydro. Ultimately, the initiatives being implemented will continue to develop best practices to move BC Hydro toward being a Top 10 Best Employer.



### **EMPLOYEE CONDUCT POLICY**

BC Hydro's Director and Employee Code of Conduct Policy provides general guidance to all employees on standards of conduct, including guidelines on conflict of interest, as well as requirements associated with confidential information, entertainment and gifts, environment and safety, and use of BC Hydro property.

#### **EMPLOYEE HEALTH AND WELLNESS**

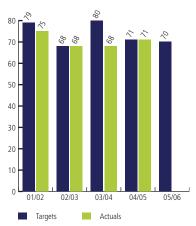
Having healthy employees is a priority for BC Hydro. Our goal is to provide employees with the resources they require to be healthier and safer at home and at work. In fiscal 2005, overall sick leave decreased slightly from 6.3 to 5.9 days per employee per year. The cross-industry norm for sick leave use is about six days per employee per year. The rate of new long-term disability claims has also decreased from 13.3 to 11.4 claims per thousand employees. The cross-industry norm is eight new claims per thousand employees per year.

Looking ahead, our health and wellness initiatives for fiscal 2006 are to:

- continue to raise manager/employee awareness about health in general
- continue to train managers to identify and manage depression in the workplace
- enhance the Employee and Family Assistance Plan with supplementary counselling services and other resources
- increase employee participation in professionally administered health screens. These screens measure cholesterol, blood pressure, body mass index and blood glucose and provide further information on reducing identified health risks
- introduce employee productivity training courses to help 200 managers become better organized and more effective in the workplace

## **Approved Strategic Workforce Planning Positions Filled**





### Definition

Approved Strategic Workforce Planning Positions Filled is the number of positions filled under BC Hydro's Strategic Workforce Planning (SWFP) initiative. SWFP is the management process for anticipating, scoping, and planning the alignment of needed critical workforce capabilities to meet BC Hydro's strategic business goals. The targets were set based on an internally performed needs assessment.

# Variance Explanation

Target met.

# **Benchmark Comparison**

No benchmark data available.



#### **Attrition Statistics**

04/05	03/04	02/03	01/02	00/01	
6.5%	5.5%	5.4%	4.0%	4.6%	
233	195	290	208	231	
4.1%	4.0%	3.0%	2.0%	2.3%	
149	143	162	106	113	
1.5%	0.7%	1.2%	1.4%	1.8%	
53	26	63	71	90	
0.9%	0.7%	1.2%	0.6%	0.5%	
31	26	65	31	26	
149	132	120	289	312	
626	570	679	583	536	
149	143	162	106	113	
24.0%	25.0%	23.9%	18.2%	21.1%	
	6.5% 233 4.1% 149 1.5% 53 0.9% 31 149 626 149	6.5%     5.5%       233     195       4.1%     4.0%       149     143       1.5%     0.7%       53     26       0.9%     0.7%       31     26       149     132       626     570       149     143	6.5%       5.5%       5.4%         233       195       290         4.1%       4.0%       3.0%         149       143       162         1.5%       0.7%       1.2%         53       26       63         0.9%       0.7%       1.2%         31       26       65         149       132       120         626       570       679         149       143       162	6.5%       5.5%       5.4%       4.0%         233       195       290       208         4.1%       4.0%       3.0%       2.0%         149       143       162       106         1.5%       0.7%       1.2%       1.4%         53       26       63       71         0.9%       0.7%       1.2%       0.6%         31       26       65       31         149       132       120       289         626       570       679       583         149       143       162       106	6.5%         5.5%         5.4%         4.0%         4.6%           233         195         290         208         231           4.1%         4.0%         3.0%         2.0%         2.3%           149         143         162         106         113           1.5%         0.7%         1.2%         1.4%         1.8%           53         26         63         71         90           0.9%         0.7%         1.2%         0.6%         0.5%           31         26         65         31         26           149         132         120         289         312           626         570         679         583         536           149         143         162         106         113

As of 2003/2004, attrition rate no longer includes retirements from Accenture Business Services and the British Columbia Transmission Corporation. BC Hydro's retirement rate has increased from the extremely low uptake rates experienced in 2000/2001 and 2001/2002 due to growth in the pool of potential retirees as more employees have become eligible.

# **EMPLOYEE RELATIONS**

Another attribute of top employers is to have healthy, respectful employee relations with our bargaining units. Our current three-year collective agreements with both International Brotherhood of Electrical Workers (IBEW) Local 258 and Canadian Office and Professional Employees (COPE) Local 378 expired on March 31, 2005. BC Hydro and IBEW Local 258 subsequently signed and ratified a Memorandum of Agreement to extend the existing collective agreement. Negotiations with COPE are still underway.

# **CORPORATE SAFETY**

We recognize that a long-term goal of having the safest working environment compared with the best performers of any industry and to have none of our employees experience a serious safety injury requires innovation, creativity, teamwork and the commitment of every employee.

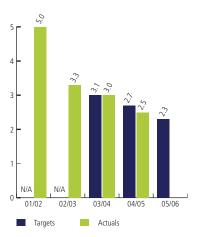
In fiscal 2005 we saw continued improvement in safety performance. This improvement retains our employees as top-quartile performers in All Injury Frequency as compared with those in peer utilities of the Canadian Electricity Association.

Despite this general improvement in safety performance, an electrical contact incident occurred at the Puntledge Substation on September 13, 2004, taking the life of one of our employees. This incident initiated a broad review of safety practices and procedures across all BC Hydro operations. This review was completed in May 2005 and included: dialogue sessions with personnel from across the province, a statistical review of all recent incidents, an external assessment of the electrical contact incident findings, and an evaluation of communication practices. All findings were provided at a two-day workshop where a broad cross-section of BC Hydro personnel discussed current issues, and identified areas where opportunities to improve exist. These opportunities are to be brought forth to BC Hydro Executive Management for action and will provide additional direction to our long-term safety strategies.



Success in achieving our vision of an injury-free workplace requires a sustained investment in teamwork, planning, maintenance of systems, training and leadership. The continued development of BC Hydro's long-term safety goal will ensure that focus is maintained, with attention to safety every day.

## **All Injury Frequency**



### Definition

All Injury Frequency is the total number of employee injury incidents (Medical Aids and Disabling Injuries) occurring in the 12 months prior to the report date relative to the amount of worked hours in the same period. For this measurement, Medical Aid injuries are defined as those where a medical practitioner has rendered services beyond the level defined as "first aid" in relation to the injury incident, and the employee was not absent from work beyond time lost on the day of the injury. Disabling injuries are defined as those that involve the employee being absent from work beyond the day of injury.

# Variance Explanation

All Injury Frequency at year-end was 7.5% ahead of target. The success in the year is attributed to the continued focus on integrating safety into our day-to-day work activity, commensurate with the level of risk being encountered. This achievement speaks to the leadership and ongoing effort of all staff as we seek continuous improvement.

### **Benchmark Comparison**

BC Hydro continues to place within the top quartile among Canadian Electricity Association peers. It is also notable that BC Hydro's improvement rate has outperformed all other major utilities in the peer group. In comparison to B.C. Industry (as measured by the Workers' Compensation Board of B.C.), BC Hydro also performs very well. BC Hydro currently is experiencing an injury rate less than half that of the B.C. average.



BC Hydro has three social long-term goals:

- The First Nations goal is to establish relationships built on mutual respect and that appropriately reflect the interests of First Nations.
- The Stakeholder Engagement goal is to be the most respected company in B.C.
- The Suppliers goal is that 100 per cent of suppliers have values congruent with those of BC Hydro.

BC Hydro will continue to be a socially responsible company, with the goal of becoming British Columbia's most respected company over the next 20 years. Areas of focus will be building strong working relationships with First Nations and resolving historic grievances. At the same time, we will listen to, engage and involve stakeholders and First Nations in our business decision-making in order to build long-term relationships and make different and better business decisions. We will also partner with suppliers who support the triple bottom line approach to business to ensure that all aspects of our operations are sustainable. In fiscal 2005 BC Hydro adopted a Social Responsibility Policy, which captures our corporate commitment to social responsibility.

# **Social Responsibility Policy**

BC Hydro is committed to producing, acquiring and delivering electricity in an environmentally, socially and financially responsible manner.

Our primary social responsibility is to provide a long-term supply of reliable and low-cost electricity to our customers in a financially sound manner. Because our business depends on building and maintaining healthy relationships with stakeholders, customers, Aboriginal communities and employees, we will act ethically and in a manner worthy of their respect.

Specifically, BC Hydro:

- Contributes to the well-being of the communities we serve through grants, scholarships, philanthropy and community service.
- Respects and responds to the diverse cultures and interests of customers and the communities where we live and work.
- Builds relationships and encourages specific stakeholder engagement, particularly where community input can contribute to better decisions.
- Invests in our employees' health, safety and capacity for leadership.
- Is accountable for our actions and impacts, responding promptly to incidents or risks arising from our business.
- Conducts our work in a manner that demonstrates a polite and respectful attitude towards the property of others.
- Seeks products, services and new supplies of energy that take into account environmental and social responsibility.
- Promotes the principles of energy efficiency and resource conservation.



### **CORPORATE CITIZENSHIP**

In living up to our social responsibility commitments, we offer a variety of outreach programs to make meaningful contributions to the cultural, social and economic well-being of the many communities we impact through our operations. Examples of initiatives and performance that support our long-term social goals are included in this section of the report.

# **Corporate and Regional Donations**

In fiscal 2005 BC Hydro supported a variety of community initiatives and programs throughout the province, contributing over \$1 million to approximately 370 projects. Donations were made in support of arts and culture, Aboriginal initiatives, community investment, education and the environment, as well as to post-secondary scholarships.

Showing a continued commitment to education, BC Hydro donated a total of \$52,000 to 13 colleges across the province in order to top up existing BC Hydro Scholarship Endowments, ensuring that a minimum of \$500 is awarded annually to eligible students. In addition, we donated \$50,000 to the Nelson and District Museum, Archives, Art Gallery and Historical Society to establish a permanent hydroelectric exhibit for public display.

# **Corporate/Regional Donations**

	04/05	03/04	02/03	01/02	00/01	
Amount Allocated (Dollars in thousands)	1,035	1,000	1,000	1,150	3,000	
Percentage Allocation						
Arts and Culture	5	7	3	9	22	
Education	14	2	0	4	20	
Environment	4	10	8	12	9	
United Way	17	17	21	26	9	
Aboriginal	8	7	12	5	13	
Regional	24	22	27	24	10	
Scholarships	13	10	16	12	11	
To Employees' Community Services Fund	10	10	11	8	3	
Community Investment	7	15	3	0	3	

In 2004/2005, BC Hydro focused funding on initiatives that best complemented its business objectives. The performance spending was dependent on the number of applications, the BC Hydro business "fit," and the amounts requested and allocated.



## **Employees and Retirees Social Commitment**

The BC Hydro Employees' Community Services Fund (HYDRECS) is an employee/retiree-driven fund that supports Canadian registered charities based in British Columbia in the health or social service sector.

HYDRECS runs an annual "Special Projects" fundraising campaign for employees and retirees throughout the province. The "Special Projects" are a combination of charities offering one provincial and four regional programs benefiting communities in British Columbia. Employees and retirees can also donate directly to the charities of their choice. Total employee (HYDRECS) donations for the year totalled \$811,000. Additionally, the HYDRECS Fund supports charities throughout the year with its Community Growth and Relationship Funds.

The BC Hydro Power Pioneers Association is made up of 2,700 retired BC Hydro employees and their spouses with 15 branches throughout British Columbia. Their motto, "Continuing a Lifetime of Service to our Communities," was demonstrated by the over 100,000 hours of community service recorded in calendar 2004 for many local charities and service clubs. Some of their Provincial partnership projects include: Youth Community Service Awards, Regional School Science Fairs (Power Smart Award), B.C. Seniors Games, Seniors Safety and Crime Prevention (Wise Owl Program) and BC Children's Hospital annual projects.

## **Employee (HYDRECS) Donations**

Dollars (in thousands)	04/05	03/04	02/03	01/02	00/01	
COPE (formerly OPEIU), IBEW, M&P	539	550	766	777	688	
Fundraisers	30	32	7	26	2	
BC Hydro Retirees	90	93	88	82	80	
Corporate Donation	100	100	100	96	96	
50/50 Draws	52	52	53	N/A	N/A	
Total	811	827	1,014	981	866	

Through the BC Hydro Employees' Community Services (HYDRECS) Fund, registered charities in the health and social service sector in B.C. benefit from the generosity of BC Hydro and Powerex employees and retirees. Contributions made in 2002/2003 and prior include those employees transferred to BCTC and Accenture.



# **Public Safety**

Our Public Safety Awareness Program is aimed at increasing public awareness concerning our facilities, thereby limiting the number of incidents with our system. Delivery of specific programs continued in fiscal 2005 and targeted four audience groups:

- elementary school children through
   Play It Safe and high school students,
   through ElectroJuice
- firefighters, police and ambulance personnel through the first responder program
- industrial workers through 7 Steps to Electrical Safety and advertising
- the general public through advertising

# **Associations and Memberships**

BC Hydro participates in many associations that help advance triple bottom line objectives. Examples include:

- World Business Council for Sustainable Development
- World Economic Forum
- Fraser Basin Council
- Peace River/Williston Reservoir Advisory Committee
- Energy Council of Canada
- Canadian Electricity Association

In these and the other associations we participate in, we strive to take an active and leadership role.

### **Public Accidents Involving BC Hydro Facilities**

Number

	04/05	03/04	02/03	01/02	00/01	99/00	98/99	97/98
Incidents	968	1,009	1,089	965	976	1,046	1,278	1,284
Public fatalities, actual	2	1	0	1	1	1	1	5
Public fatalities, target	0	0	0	0	0	0	0	0

This performance measure includes any public incidents that involve our system. It captures all injuries, fatalities, or the obvious potential for these outcomes to the general public. While the incidents may involve damage to BC Hydro facilities, they do not include vehicle accidents. BC Hydro's ability to control the occurrence of public incidents is limited; however, the company consistently provides public awareness programming with a focus on higher risk groups, and increases its investment if the number of incidents or fatalities increases. Annually, BC Hydro conducts risk and trend analysis to identify changes (particularly higher risk issues) and/or affirm the effectiveness of the programming. The number of incidents over last year is within the random variation observed year over year. BC Hydro's target for 2005/2006 remains at zero fatalities.



#### FIRST NATIONS RELATIONSHIPS

Areas of focus for our First Nations goal are to develop strong relationships built on mutual respect, engage in meaningful dialogue and accommodation for new work, and address potential impacts on Aboriginal rights with respect to new developments. As we have many facilities located on First Nations' traditional territories, it clearly makes good business sense for us to build effective working relationships with First Nations. Resolving historical grievances will be a critical factor in achieving this goal and is a top priority. Developing relationships that increase First Nations' partnerships and increase Aboriginal employment and procurement opportunities will also be important factors in reaching this goal.

#### **Principles for Relations with Aboriginal People**

BC Hydro recognizes that the population of aboriginal First Nations in British Columbia has a distinct legal, historical and cultural status, and engagement with them must recognize this. BC Hydro uses a principle-based approach to establish mutually beneficial relations with First Nations. Our Board of Directors has adopted a *Statement of Principles for Relations with Aboriginal People* to serve as instructions for staff and management in their day-to-day dealings with First Nations.

As a key step in fulfilling our First Nations goal, we took a different approach to the 2005 Integrated Electricity Plan (IEP), by engaging First Nations separately from stakeholders. The purpose of the 2005 IEP First Nations and stakeholder engagement process is to involve both First Nations and stakeholders in a meaningful way in electricity planning. The engagement process was designed to gain insights from across the province into First Nations' and stakeholders' values and interests around resource options (i.e., ways of generating electricity) and the criteria by which they should be assessed. This regional input has been and will continue to be considered by a dedicated committee of stakeholders and First Nations representatives charged with making recommendations to BC Hydro. The first round of stakeholder and First Nations engagement has been completed. In a related engagement initiative, BC Hydro focused on getting input for the 2005 Resource Options Report (ROR). The key objective of the ROR engagement was to obtain technical information about resource options (e.g., wind, coal, wave, natural gas) to ensure proper characterization of these resources before the BCUC.



#### **Aboriginal Business Partnership Program**

	03/04 and 04/05	02/03	01/02	00/01	99/00
Participants (Number)	48	32	33	26	8
Expenditures (Dollars in thousands)	315	300	300	150	75

This is one of a number of programs BC Hydro has to support the economic and social development of Aboriginal communities. In the combined 2003/2004 and 2004/2005 fiscal years, the Aboriginal Business Partnership Program received 260 applications with 48 grants issued. In late 2004, another program was launched with 80 applications received and 25 grants awarded. The remaining grants will be issued later in 2005 and reported in 2006.

#### STAKEHOLDER ENGAGEMENT

BC Hydro will become the most respected company in B.C. by conducting engagement projects that model our core values: accountability, integrity, service and teamwork. Effective stakeholder engagement means involving both stakeholders and First Nations in our business decision-making. It also involves exchanging information and ideas, understanding diverse views, values and preferences and inviting broad input into our decisions. Over the long term, we will work to continuously improve the ways we engage others and to firmly embed stakeholder engagement in BC Hydro's culture and business practices.

BC Hydro defines "stakeholders" as those people or organizations who have an interest in, or can impact, what we do and how we do it. Key stakeholder groups include:

- local communities and municipal governments
- non-government organizations, opinion leaders and advocacy groups
- customers (residential, commercial and industrial)
- shareholder (Government of British Columbia)
- suppliers and business partners
- regulatory agencies
- intervenors or potential intervenors at BCUC regulatory hearings
- employees (M&P [Management and Professional] and trade unions)



BC Hydro's aim is to engage the right people at the right time and in the right ways. Because BC Hydro does not have all the answers, we will seek input from stakeholders and First Nations to ensure that our engagement efforts are effective.

The information we receive from stakeholders is used in a variety of ways. Focus groups, for example, are used to identify opportunities for improving service delivery; feedback from the *Open Calls for Power* process is used to amend terms and conditions for bidding and sale of energy to BC Hydro; and community engagement initiatives may result in consideration of different locations and siting for new facilities. Following is an example of a project-specific engagement with external stakeholders.

#### Considering Multiple Use Interests for the Upper Arrow Drawdown Zone

To address conflicts between user groups, and to accommodate the multiple use interests that occur in the drawdown zone of the Upper Arrow Lakes Reservoir, between Revelstoke and Shelter Bay, we initiated a community consultation process to receive public input into the development of a public use management plan. The consultation was launched with a community-wide public workshop to identify key interests and help start this process with meaningful dialogue covering a range of interests. Following the workshop, a broad-based liaison committee was formed representing property owners, local government and agencies, BC Hydro, and various recreational and conservation organizations. Through a series of meetings, stakeholders gained an understanding of each other's interests and provided valuable advice and input to BC Hydro for the development of the plan. In the implementation phase BC Hydro will work with an ongoing Advisory Committee representing local interests to discuss details related to implementation, education and enforcement. A public open house will also be organized to present the plan to other interested individuals

#### **SUPPLIERS**

In addition to BC Hydro's Board of Directors ratifying a Corporate Social Responsibility policy, which includes a commitment to "seek products, services and new supplies of energy that take into account environmental and social responsibility," they also endorsed a long-term goal that "100% of suppliers have demonstrated values congruent with those of BC Hydro." Work is now underway to clarify this goal and develop a plan to achieve it. This year, we implemented the following initiatives.

#### **Quality Assurance Inspections**

Quality assurance engineers developed and tested a cost-effective method for integrating social and environmental aspects into our factory evaluations.

BC Hydro contractors visited six plants in Brazil and Mexico, and the results were positive. Suppliers reviewed were forthcoming with information, and issues such as workplace safety and handling of hazardous materials were systematically managed. Our next steps will be to formalize the evaluation process and to integrate it into our supplier contracts.



#### **Compact Fluorescent Light bulbs**

BC Hydro Customer Care and Power Smart has now added an "Ethical Sourcing Section" to all tenders allowing for, among other things, on-site plant inspections when necessary in our purchasing contracts for compact fluorescent light bulbs. The statement was used once and will be used for more programs in the fall. A similar statement is currently in development for seasonal LED lights.

#### Statement of Ethical Values for Purchasing

BC Hydro's Materials Management Business Unit, responsible for purchasing \$79 million worth of goods each year, has developed a proposed set of values to guide purchasing. The Ethical Values for Contracting apply specifically to the purchase of goods and services from both domestic and foreign contractors. These values are based on and consistent with the codes of conduct in British Columbia and Canada and applicable Conventions of the International Labour Standards, a United Nations-sponsored set of standards endorsed by most countries of the world.

#### **Recycled Paper Supplies**

We have increased the requirement for recycled paper in all of our recent graphics and copy paper supply contracts. By the end of fiscal 2006 we will be using 100 per cent post-consumer recycled stock in all of our advertising material.

#### Liquid Crystal Display Screens vs. Cathode Ray Monitors

A business case and life cycle analysis was conducted that demonstrated a significant environmental benefit to purchasing LCD monitors. The computer purchasing standard was revised to reflect this added value.



BC Hydro has two environmental long-term goals:

- The Environmental Impact goal is to have no net incremental environmental impact.
- The Electricity Intensity Reduction goal is to develop and foster a conservation culture in B.C. that leads to customers choosing to make a dramatic and permanent reduction in electricity intensity.

Protecting the environment today will ensure a sustainable future. BC Hydro will seek to better understand the environmental footprint of our operations and run our business in ways that produce no net incremental environmental impacts. Where impacts are unavoidable, we are committed to developing positive projects (such as investments in fish stocks) or purchasing offsets to mitigate these impacts.

In partnerships with stakeholders and First Nations groups, we will foster a culture of conservation and energy efficiency and will encourage British Columbians to make wise energy choices. Lower provincial energy use will result in fewer power plants being built and a smaller environmental footprint. Examples of some of our environmental and energy conservation commitments and actions are listed on the following pages.

#### **Environmental Responsibility Policy**

BC Hydro's Environmental Responsibility Policy reflects our commitment to maintain today's environmental footprint, even as the demand for electricity continues to grow. The environmental policy is under review to ensure it reflects BC Hydro's new long-term goals, and changes may be made to ensure alignment.

*Policy:* Consistent with our purpose of providing reliable power, at low cost, for generations, BC Hydro's environmental priority is to avoid causing additional impacts. However, we know that operating our energy system has impacts on the environment and other users of publicly shared resources. Therefore, where impacts are created, we will work to reduce them, enhance affected habitat, and sustain resources over the long term.

Specifically, BC Hydro will:

- Meet or exceed environmental requirements defined by legislation, regulation, government directives and guidelines, and our commitments and agreements;
- Better understand the effects of our business as a means to continuously improve our environmental performance;
- Work cooperatively with stakeholders and First Nations on resource use, management, and conservation to increase public benefits from affected resources; and
- Publicly report on our environmental performance.



### NO NET INCREMENTAL ENVIRONMENTAL IMPACT

#### **Environmental Management Systems**

Two environmental briefing sessions were held with the Board of Directors and senior executives to provide an overview of environmental issues at BC Hydro. Results from these two sessions demonstrated the desire to move BC Hydro towards zero net environmental impact. The focus of the next year will be: to understand our impacts and set performance measures and targets for improvement; and for all employees to undertake impact reduction projects. The incorporation of the new, no net incremental environmental impact goal into the Environmental Management System was initiated in late fiscal 2005.

Primary areas of focus were reviewing the Environmental Policy and Statements of Strategic Intent to ensure alignment to the new long-term goals. In March 2005 an audit of the effectiveness of BC Hydro's Environmental Management System (EMS) was initiated to assess BC Hydro's EMS structure and effectiveness.

The following areas have obtained ISO 14001 registration (see Glossary):

- Thermal Operations (Burrard Thermal Generating Station, Prince Rupert Generating Station, and Fort Nelson Generating Station).
- Powertech Laboratories

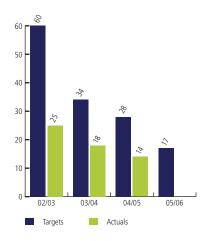
In addition to BC Hydro's increased focus on managing its environmental impact, many projects have been implemented in fiscal 2005. Some of these projects are outlined in this section.

#### **Environmental Incident Reporting**

BC Hydro's environmental incidents are internally reported, communicated and closed through the intranet-based Environmental Incident Reporting (EIR) system. Incidents filed in the EIR system are summarized quarterly and provided to senior management and the Audit and Risk Management Committee of the Board. The direct responses to incidents, root cause analyses and corrective actions (where applicable) are addressed through the Lines of Business Environmental Management Systems. In fiscal 2005 the total number of incidents recorded in the EIR was 119, similar to the 118 incidents recorded in fiscal 2004. The total number of incidents includes those reported in the Environmental Regulatory Compliance data. No severe environmental incidents were reported.

#### **Environmental Regulatory Compliance**

Number of Incidents



#### **Definition**

Environmental Regulatory Compliance (ERC) is the number of externally reportable, preventable environmental incidents.

#### **Variance Explanation**

The Environmental Regulatory Compliance results are lower than the target. Targets for this measure were derived from historical rates. Three years of actual data, using established evaluation procedures and criteria, indicate the targets for this measure were set too high. Targets have been lowered to better reflect actual performance. The overall trend over the last three years indicates the number of ERC incidents has declined, however, the difference is within historical variability of this measure. Of the 14 incidents that qualified as preventable, none were characterized as "severe."

For this type of measure there is an inherent risk of unreported incidents. BC Hydro is currently reviewing its controls to ensure that all applicable incidents are reported. As well, with the introduction of the Environmental Long-term Goal, this measure is under review.

\* 2002/2003 and 2003/2004 include the British Columbia Transmission Corporation's (BCTC) externally reportable, preventable environmental incidents. Beginning fiscal 2004/2005 actuals and targets no longer include BCTC.

#### **Benchmark Comparison**

No benchmark data available.



### Environmental Commitment & Responsibility Program

As a member of the Canadian Electricity Association (CEA), BC Hydro is an active participant in the Environmental Commitment & Responsibility program (ECR), launched by CEA members in 1997. Participants in the ECR program must make a commitment to continuous environmental improvement. For BC Hydro, participation in the ECR program means continuing with existing environmental initiatives, improving our performance monitoring and reporting, and maintaining our EMS to a level consistent with the ISO 14001 standard. For example, our greenhouse gas emissions are submitted voluntarily to the CEA and reported in their Environmental Commitment & Responsibility Report.

BC Hydro also voluntarily produces an annual Greenhouse Gas Report. The latest report will be available later this year.

#### Compensation and Restoration Programs

Three programs are in place to mitigate historic impacts on fish and wildlife habitat resulting from the construction of hydroelectric facilities. Established by the BC Hydro and the Ministry of Water, Land and Air Protection, the programs involve multi-stakeholder and First Nations engagement, priority research projects and other compensation efforts.

- Columbia Basin Fish and Wildlife Compensation Program The Columbia Basin Fish and Wildlife Compensation Program operates in the Canadian portion of the Columbia River Basin. In fiscal 2005 BC Hydro committed \$3.8 million to fish and wildlife projects in the Basin. Twenty-three wildlife projects and 28 fish projects were funded with dozens of local partners. The largest project funded by the Compensation Program is the Fertilization Program in Kootenay Lake and the Arrow Lakes Reservoir. This is considered one of the largest lake restoration projects in the world. In fall 2004, kokanee spawners returned at near historical levels making this the best year for spawners in a decade – a testament to the success of the fertilization program.
- Peace-Williston Fish and Wildlife
   Compensation Program
   The Peace-Williston Fish and Wildlife
   Compensation Program operates within
   the watersheds of Williston and Dinosaur
   Reservoirs in northern B.C. During fiscal
   2005 the program directed \$1.1 million
   to 19 fish and 13 wildlife research and
   enhancement projects. Fish projects
   included work with Arctic Grayling
   throughout the Williston watershed,
   with wildlife projects including research
   on goats and Stone's sheep.

Bridge Coastal Restoration Program
 The BC Hydro Bridge Coastal Restoration
 Program funds projects to restore fish and wildlife populations and habitat in the Coastal Generation Area. This area includes 15 watersheds in the Fraser
 Valley, Vancouver Island, Coastal, Bridge River and Shuswap. In fiscal 2005
 BC Hydro committed \$1.4 million to the program for the funding of 27 fish and wildlife projects.

### Upper Columbia White Sturgeon Recovery Initiative

As part of a separate environmental initiative, the Upper Columbia White Sturgeon Recovery Initiative (UCWSRI) partners and community volunteers welcomed 175 local school children to release over 9,000 juvenile white sturgeon into the upper Columbia River between Trail and Castlegar in May 2004. Involving youth in education and outreach initiatives is key to ensuring the longevity of the initiative and rebuilding the white sturgeon population over the next 30 years or more. The UCWSRI began in 2000 with a two-year agreement signed between the provincial and federal governments and BC Hydro to help white sturgeon return from the brink of extinction in this portion of the Columbia River.



#### **AIR MANAGEMENT**

BC Hydro manages air emissions at the facility level through emission reduction equipment at each facility designed to reduce local air emissions, and on a corporation-wide level aimed at addressing broader issues such as greenhouse gas (GHG) emissions and climate change. BC Hydro meets or exceeds permit requirements for facilities that require an air emissions permit. There are currently no regulations concerning the emissions of greenhouse gasses.

BC Hydro has anticipated the need to manage GHG emissions and has put in place a series of programs aligned with our long- term goals to lower GHG emissions, create a more robust generation system, lower costs to our customers and reduce liability under future GHG regulations. These programs include:

- Power Smart demand-side management over 3,000 GWh of cumulative energy savings, equivalent to the emissions of one-and-a-half 250 MW natural gas-fired generating facilities.
- Resource Smart operational efficiencies and facility upgrades now contributing over 1,200 GWh per year of cumulative reliable energy, equivalent to half the emissions of a 250 MW natural gas-fired generating facility.
- Green Energy low-impact and low or zero-emission generation contributed almost 800 GWh in 2004, avoiding the equivalent of one-quarter of a 250 MW natural gas-fired generating facility.

BC Hydro's air and GHG emissions are tracked and reported on a calendar year basis in line with regulatory expectations. For the 2004 calendar year, BC Hydro's emissions are compiled in accordance with the Greenhouse Gas Protocol created by the World Business Council for Sustainable Development and World Resources Institute. BC Hydro has also made significant effort to create a comprehensive picture of the emissions attributable to the electricity we deliver to customers. The table on the following page provides a summary of GHG emissions attributable to electricity generated in B.C. and delivered to BC Hydro customers in calendar 2004.



### Consolidated Summary of Greenhouse Gas (GHG) Emissions Attributable to Electricity Delivered to BC Hydro Customers

Calendar Year	2000	2001	2002	2003	2004
BC Hydro Direct GHG Emissions					
BC Hydro thermal facilities	1,833	2,385	296	259	450
Fugitive Sulphur Hexaflouride (SF <sub>6</sub> )	81	81	64	77	67
Buildings	4	4	3	2	3
Vehicles	15	15	15	18	16
Indirect GHG Emissions					
B.Cbased independent power producers	297	512	818	808	1,188
Customer based generation and load displacement					284
Offsets					
Island Cogeneration Project		(120)	(250)	(260)	(327)
Totals					
Total GHG Emissions	2,230	2,877	946	904	1,681
Total Domestic Sales (GWh)	48,068	47,828	48,397	51,004	50,718
Average GHG intensity (t CO <sub>2</sub> e/GWh)	46	60	20	18	33

Numbers are reported in carbon dioxide equivalent kilotonnes (kt CO2e) unless otherwise noted.

#### Fleet Vehicle Emissions Pilot

In fiscal 2005 seven low-emission Toyota Prius hybrid vehicles were introduced into the light vehicle fleet of BC Hydro on a pilot basis. Covered in decals with eye-catching energy efficiency slogans, the hybrids demonstrate our commitment to emissions reduction in our operations. Targets for the future will be established to promote the development of low-emission technologies, including bio-diesel and hydrogen with a target of a visibly low-emission fleet to be achieved by 2010. In addition to increasing the number of hybrid vehicles in the fleet, a bio-diesel pilot for the large truck portion of the fleet will be conducted in fiscal 2006.



#### LAND MANAGEMENT

BC Hydro has thousands of kilometres of power lines, hundreds of facilities throughout the province, and many tonnes of materials that must be transported safely every day. We adhere to standardized procedures for vegetation management in and around our facilities and along power line rights-of-way to maintain safe, reliable delivery of power.

#### **Community Regreening**

BC Hydro strives to keep the power on even during the most severe winter storms and other extreme conditions, when it is most essential. The key to maintaining and improving service to any community with a large number of trees is to ensure that healthy trees of the correct species are growing near power lines. In 2004 we launched a program that partners with communities and local organizations to plant desirable urban trees. One benefit of the program is the identification and removal of declining or hazardous trees that threaten power lines, and replanting of low-growing trees and shrubs. These Community Regreening partnerships reduce electrical hazards while enhancing urban forests – creating safer, more attractive, more biodiverse, sustainable, better communities in which to live. In its first year the Community Regreening initiative funded urban forest projects in more than 40 communities, ranging in size from Masset and Tseshaht to Kamloops and Vancouver.

#### **Management of Contaminated Sites**

In 2004 we accelerated by two years our strategy to assess the risks of contamination posed by historically contaminated sites. Preliminary site investigations at all of our active or former diesel generating stations were completed. As a result, we are now aware that four sites show no evidence of contamination, and management plans are in place to address the contamination present at the remaining 16 diesel sites for which we are responsible.

Rock Bay Remediation Project – Rock Bay, the largest contaminated site remediation project currently underway in B.C., is a joint undertaking of BC Hydro and Transport Canada and has received strong support from the City of Victoria. Implementation of stage one of the project began in fiscal 2005 and focused on the excavation and treatment of coal-tar-contaminated soil. Soil treatment techniques include the use of naturally occurring bacteria to break down the contaminants, and thermal treatment plant technology which uses catalytic oxidation at 2,000 °C to transform the contaminants into CO<sub>2</sub> and water vapour. The work is ongoing, with highlights to date being: treatment of approximately 60,000 tonnes of contaminated soil and the removal of thousands of litres of liquid tar from underground storage tanks as old as 150 years. Stage two is planned for the latter part of 2005 and stage three (sediment remediation) is planned for 2006. When complete, the \$35 million project will return a prime waterfront site to full use.

Tofino Diesel Remediation Project – A significant accomplishment this year was the partnership between Transport Canada and BC Hydro to remediate the former Tofino Diesel Generating Station. The station was built at the Tofino Airport in the 1940s by the Department of National Defence. BC Hydro operated the station from 1951 until it closed in the early 1970s. In 2004 severe hydrocarbon contamination was excavated and removed from portions of the small creek adjacent to the site. Salmon were subsequently observed in pools created to promote fish spawning and rearing. We will continue to monitor the creek to assess the success of the soil remediation and restoration of the natural habitat.

Oak Street Contamination – The Oak Street site is a property at the foot of Oak Street in Vancouver that was contaminated by coal tar, a by-product of coal gasification operations prior to the 1950s. While most of the coal tar originated from BC Electric's coal gasification plant in False Creek, the Oak Street site was owned and operated by a roofing plant, coal tar being a necessary product for manufacture of roofing material. The site has been cleaned up by the current and previous property owners and operators at a total cost of \$10 million to \$11 million, but the issue of BC Hydro's responsibility, if any, for any portion of the costs of the cleanup remains outstanding. On January 20, 2005, the Supreme Court of Canada overturned a B.C. Court of Appeal ruling from 2003 that BC Hydro could not legally be a "responsible person" in respect of the site because of the terms of its amalgamation with BC Electric and the BC Power Commission in 1965.



While the Supreme Court decision was related to a technical legal argument – and we have strong factual grounds for why we should not be held liable for the costs of the cleanup – we are looking at this as an opportunity to be intentional about how we move forward in a way that is consistent with our purpose and goals. BC Hydro strategies related to contaminated sites are founded on the polluter pays principle. The Oak Street decision does not affect this strategy; however, there is a need to review our strategies in the context of our purpose and long-term goals.

#### **Recycling and Waste Management**

In fiscal 2005 we diverted 3,394 tonnes of non-hazardous materials from landfills. This is up from 2,788 tonnes the previous year. Materials included 2,054 tonnes of scrap metal, 906 tonnes of wood from poles, 619 tonnes of ceramic insulators, 201 tonnes of paper, 32 tonnes of cardboard, 56 tonnes of electronic devices, and smaller quantities of fluorescent tubes, batteries and other materials. The total results is a landfill diversion rate of 75 per cent, exceeding the target of 65 per cent. Targets for landfill diversion are set for 78 per cent in fiscal 2006. By 2025, BC Hydro's long-term goal is to divert 95 per cent of non-hazardous waste from landfills.

### Managing Polychlorinated Biphenyls (PCBs)

To maintain high levels of service, BC Hydro continuously upgrades our distribution transformers as load increases or as units fail. This process continually reduces the

number of older units that could contain PCB-contaminated oil. This year BC Hydro also launched an active program to eliminate ground-level transformers containing PCBs above federal thresholds. In the first year of the three-year testing program, levels of PCB were confirmed for approximately one-third of all padmounted units. All units exceeding the thresholds will be replaced.

#### **Species at Risk**

BC Hydro has proactively developed many initiatives to assist in compliance with federal and provincial Species at Risk legislation and to assist in the development and implementation of programs, policies and regulations to protect biodiversity, species at risk and critical habitat. Efforts include:

- active involvement in recovery programs
- membership in federal and provincial species at risk policy and regulatory committees to develop and implement regulations, policies and procedures and to link compliance with stewardship
- incorporation of species at risk needs in water use plans

#### WATER MANAGEMENT

#### Water Use Planning

The development of a Water Use Plan for each of Generation's hydroelectric facilities strikes a balance of economic, environmental and social water use interests. Initiated in 1998, the Water Use Planning Program has approached water management decision—making through inclusive consultation and the explicit assessment of operating alternatives that consider a diverse range of water use interests.

By the end of fiscal 2005, consultation was complete on all 23 Water Use Plans, and 22 draft Water Use Plans were written and submitted to the government. In addition, the Comptroller of Water Rights had approved six Water Use Plans. Consultation has resulted in a high degree of agreement among the broad spectrum of regulatory and public participants.

The six-year, \$27 million capital project for drafting Water Use Plans will conclude in fiscal 2006. A smooth transition to delivery of the new licence requirements is underway.

Some Water Use Plans will increase power value from the generating facilities. Others will result in a loss in value. Monitoring programs will provide better understanding of social and environmental interests.



The Water Use Plan process won two awards in fiscal 2005:

- The Fraser Basin Council made their 2004
   Sustainability Award in the category of
   Caring for Ecosystems to BC Hydro for
   the Water Use Plan Program.
- The Association of Professional Engineers and Geoscientists made their 2004
   Sustainability Award to BC Hydro for the Water Use Plan Program.

Also, Energy Globe ranked BC Hydro's Water Use Plan Program in the top five for the 2004 Energy Globe Award for Sustainability in the Water category.

#### **Fisheries Act Compliance**

BC Hydro is involved with the Canadian Electricity Association and Fisheries and Oceans Canada (DFO) to create a better understanding of the federal Fisheries Act compliance. Draft interpretation bulletins have been prepared for flow and fish passage for new facilities. Completion of other interpretation bulletins and application to existing facilities is on hold pending DFO internal policy review.

#### **ELECTRICITY INTENSITY REDUCTION**

#### **Energy Conservation Initiatives**

In pursuing our goal to develop and foster a conservation culture in the province, BC Hydro continued in fiscal 2005 with aggressive demand-side management (DSM) initiatives. Power Smart, our highly successful DSM initiative, offers customers a wide variety of incentives to use energy wisely. Power Smart exceeded the

#### Status of Reservoir Archaeology Management Plans

The operations of BC Hydro reservoirs may be impacting archaeological sites that are protected by the BC Heritage Conservation Act. Various First Nations have expressed concerns over impacts to archaeological resources in reservoir drawdown zones. The presence or absence, location, and degree of our impacts to these sites is largely unknown at this time. BC Hydro is developing plans to address this issue. To reach the performance goals for 2005/2006, we will:

- define area of potential impact around each BC Hydro reservoir
- identify known archaeology sites and previously surveyed areas within our zone of potential impact for each reservoir
- define a schedule to complete surveys in potentially impacted areas in future years. This is the first year this performance measure has been reported.

cumulative energy savings target of 1,315 GWh by 40 GWh at the end of fiscal 2005, the third year of the Power Smart 10-year plan. The 10-year goal is to acquire over 3,600 GWh, providing for 30 to 40 per cent of new load growth over the same 10-year period.

While our success with Power Smart is something to be proud of, we need – and want – to do more. Residents of our province still use more electricity per capita than people in the U.S. or Europe. We need to develop a real conservation culture in B.C. in order to meet our long-term goal around Electricity Intensity Reduction.

#### **Power Smart Partners**

The Power Smart Partner (PSP) program is the flagship DSM program for BC Hydro's top commercial, government and industrial customers. The program is based on a partnering approach with our top business customers and its chief objective is to encourage customers to integrate energy efficiency into their business practices.

#### **Customer Electricity Intensity**

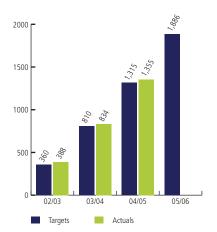
Calendar Year	2003
Residential (kWh per person per year)	3,989
Non-residential (kWh per \$1,000 GDP)	251

BC Hydro will be tracking electricity intensity as one of several leading indicators for potential demand growth. Residential electricity intensity is calculated by dividing the total provincial residential electricity sales by the total population of B.C. The non-residential figure is calculated by dividing the total business electricity sales by the provincial Gross Domestic Product (GDP) expressed in constant 1997 dollars. This is the first year this performance measure is being reported, with 2003 serving as the baseline year. All data was supplied by Statistics Canada; 2004 data is not yet available.



A customer who commits to being a Power Smart Partner gains access to financial incentives as well as assistance to identify and implement electricity savings. Specific components of the program include funds to help identify energy-saving opportunities (ESO) and implement cost-effective projects (Incentive Fund), education and information on energy efficiency, and public and peer recognition activities. As of March 2005, Power Smart has signed PSP agreements with 359 Partners and acquired 592 GWh/year of electricity savings.

#### **Conservation Gigawatt Hours**



#### Definition

Conservation Gigawatt Hours (GWh) is the cumulative gigawatt hours saved as a result of economic demand-side management. The targets are based on net savings from current Power Smart programs and programs expected to come on stream. In the future, the Conservation GWh measure will be redefined as Demand-Side Management GWh to acknowledge the inclusion of both past and future energy efficiency and load displacement projects.

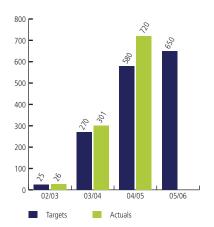
#### **Variance Explanation**

The 2004/2005 target has been revised from 1,310 to 1,315 as it was incorrectly reported in the 2004 Service Plan. Energy savings were above plan because program participation and market effects were higher than anticipated in the industrial and residential sectors. This was partially offset by lower-than-anticipated program participation in the commercial sector. The target for 2005/2006 has been updated to 1,886 GWh/yr to reflect the most recent version of the 10-Year Plan for Power Smart. The results include both residential and business demand-side management.

#### **Benchmark Comparisons**

No benchmark data available.

#### **Green Gigawatt Hours**



#### Definition

Green Gigwatt Hours (GWh) is the cumulative gigawatt hours contracted from green sources that meet purchase price limits.

#### **Variance Explanation**

Green GWh is above target due to BC Hydro acquiring more cost-competitive green energy than the planned target.

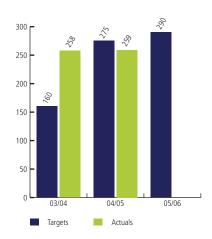
In 2005/2006 the 50% Clean Energy target will replace the Customer-Based Generation and Green GWh performance measures as these measures are a subset of the clean energy definition and will be captured within this target GWh volume.

#### **Benchmark Comparison**

No benchmark data available.

#### **Customer-Based Generation**

Gigawatt Hours



#### **Definition**

Customer-Based Generation Gigawatt Hours (GWh) is defined as GWh delivered from customer-based generation sources that meet purchase price limits.

#### **Variance Explanation**

Customer-Based Generation GWh is below target due to the Contract on Delivery (COD) delay of the third project until 2007/2008 and the cancellation of the fourth project.

In 2005/2006 the 50% Clean Energy target will replace the Customer-Based Generation and Green GWh performance measures as these measures are a subset of the clean energy definition and will be captured within this target GWh volume.

#### **Benchmark Comparisons**

No benchmark data available.



#### **Large Project Incentive Program**

The Power Smart Large Project Incentive program was launched this year to help customers implement large energy efficiency and load displacement projects (projects that help lower a customer's electrical load or projects that generate their own power thereby displacing load that BC Hydro would have had to provide) by offering partial funding of large-scale projects through a formal, competitive process that is open, transparent and fair. The initial call for projects occurred this year and was successful in securing 50 GWh/year of energy savings.

#### **Power Smart Certified Program**

Power Smart Certified customers represent a select group of energy-efficient companies within their industry. Over the year, these organizations have worked diligently at building on their previous achievements and putting their Power Smart commitment into action. Three customers received the Power Smart Certified designation this year: Hudson's Bay Company (first retailer), Canadian AutoParts Toyota Inc. (first manufacturing customer), and School District 34 Abbotsford (first school district). These three bring the total Power Smart Certified organizations to nine, joining: the City of Richmond, Fairmont Hotels & Resorts, Kwantlen University College, UBC, VanCity Credit Union, and Vancouver International Airport Authority.

#### **Power Smart Residential Programs**

Our residential energy conservation programs have been well received by customers who want to reduce their electrical consumption and save money. In June 2004 BC Hydro launched the final phase of its compact fluorescent light bulb (CFL) giveaway campaign, offering the program to customers in the north and south Interior of the province. This concluded the highly successful giveaway portion of the CFL campaign, which launched on Vancouver Island in October 2002. Over two years, BC Hydro distributed approximately 1.8 million CFLs to nearly 650,000 customers at retailers across the province. In October 2004 BC Hydro launched a pilot lighting program on Vancouver Island and the Lower Mainland encouraging customers to exchange their old holiday lights and halogen floor lamps at retail events hosted by Power Smart. In return, customers received valuable coupons towards LED holiday lights, CFL floor lamps and CFL bulbs. This successful pilot resulted in the direct sale of more than 54,000 strings of LED holiday lights, 11,000 CFL floor lamps and 21,000 CFL bulbs. The insights gained from this pilot are being used to plan future initiatives that will continue to support the adoption of energy-efficient lighting technologies in the residential market.

The Power Smart Refrigerator Buy-Back program continued to operate across the province in 2004, collecting more than 39,000 second operating refrigerators.

BC Hydro paid customers \$30 to pick up their second refrigerator and dispose of it, free of charge in an environmentally friendly way. In new construction, more than 1,100 new housing units were built in 2004 that included Power Smart packages of energy-efficient products, from CFLs to Energy Star<sup>®</sup> appliances. There are currently more than 2,200 new housing units under construction that include Power Smart packages of energy-efficient products.

#### **Power Smart School Programs**

Recognizing that awareness of energy conservation must be learned, BC Hydro has provided energy conservation education programs for schools for several years. Over the past 12 months alone, Power Smart has been extremely active in B.C. schools at a number of grade levels, reaching nearly 60,000 students in 280 schools (spanning 27 districts). The program aims to reinforce Power Smart messages with school-age children and to encourage a lifelong commitment to the Power Smart ethic. It includes a range of tactics, including behavioural change campaigns, energy audits of schools, and interactive energy games that demonstrate how individual efforts can lead to significant energy savings.

#### Prince George Pilot Street Lighting Program

Faced with growing energy consumption, cities are becoming increasingly receptive to our demand-side management initiatives. In 2004 Power Smart implemented a pilot



street lighting demonstration project with the City of Prince George. The project uses a new technology that allows streetlights to be dimmed to achieve significant energy savings. The process of dimming streetlights at designated times of the night, the day, the week or the season will achieve energy savings for the customer and for BC Hydro. The city will not only save electricity, but also benefit from reduced maintenance costs. Installation of the lights has begun, with the goal to install this technology in 171 streetlights in Prince George.

#### **Resource Smart**

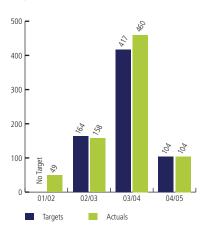
The Resource Smart program, introduced in the late 1980s, promotes the identification, study and implementation of projects that provide cost-effective energy gains at existing generating plants. Once constructed, Resource Smart projects have little or no environmental impact.

Two Resource Smart projects were brought into service in fiscal 2005. The first unit at Cheakamus was upgraded and returned to service in April 2004 as planned. At G.M. Shrum, the turbine upgrade on unit G8 was completed as planned and returned to service in November 2004. The annual energy gain from the two projects is 104 GWh per year

In another Resource Smart initiative. scheduled for completion in 2007, the Aberfeldie Generating Station is being rebuilt to increase its generating capacity. The station was built in 1922 and is currently our oldest facility. It is a two-unit, 5 MW run-of-river power plant that generates approximately 34 GWh/year. The powerhouse and core generating equipment are original. Condition assessments have determined that the facility will require extensive capital investment to continue operating. The most economic option is to redevelop Aberfeldie into a facility of approximately 25 MW that would increase the average energy from Aberfeldie to 105 GWh/year. The \$45.9 million project includes a new powerhouse and switchyard and replacement of the penstock.

### Resource Smart Energy Gains Put into Service

Gigawatt Hours



#### **Definition**

Resource Smart Energy Gains Put Into Service are the projected, long-term average incremental energy gains for existing Generation facilities, which are put into service during the year.

#### **Variance Explanation**

Targets are based on the identification, study and implementation of projects that provide economic energy gains at existing BC Hydro facilities, and typically have little incremental environmental impact. These targets support the Government objective of 50% of new electricity supply from clean energy sources. Targets have been revised downward to reflect changing priorities related to operational circumstances and project work schedules. There is a finite number of energy gain projects available within the system. The projects that had the largest positive impact were developed first. Energy gains from future projects will not be as significant.

#### **Benchmark Comparison**

No benchmark data available.



#### OTHER ENERGY-RELATED INITIATIVES

#### **Green Power Certificate Program**

Helping our customers meet their environmental targets has turned into a growing business for BC Hydro. Sales of Green Power Certificates (GPC) to business customers continued to grow after becoming a permanent offer in fiscal 2004. GPCs also help to create demand for additional green energy generation in B.C. Each certificate represents the green attributes and emission reductions from one megawatt hour of green power generation. GPC sales to business customers (for delivery in 2004/2005) reached 28,535, more than triple last year's total. Sales for fiscal 2006 already appear strong, thanks in part to the fact that several organizations have committed to purchases over several years.

#### **Clean Energy Results**

A final example of our commitment to meet our environmental impact goal is our Clean Energy Target of 50 per cent of new supply to be achieved over a 10-year period. The annual results will fluctuate based on updates to the load forecast, and the timing, volume and type of actual supply delivered. For fiscal 2004/2005, BC Hydro has acquired approximately 61 per cent (872 GWh) of the planned incremental load. Since the formulation of the plan, there has been a significant increase in our demand requirements, as reflected in the load forecast in January 2005. As a result, our annual target of incremental load, after Power Smart,

was revised from 1,438 GWh to 2,463 GWh. Based on this revised incremental load, the Clean Energy acquired in fiscal 2005 was only 35 per cent. Since the target is to be achieved over a 10-year period, BC Hydro will need to acquire more energy during this period. In order to meet our target over 10 years, BC Hydro has announced two open calls for 2005 and 2006 for 1,000 GWh each to assist us in addressing the current gap. All proven technologies, except nuclear, are eligible for these calls. In particular, we will be looking to add to green energy totals through these calls.

#### New Electricity from Clean Energy

Percentage

	03/04	04/05	05/06
Target (10-year average)	50%	50%	50%
Actual	52%	61%* / 35%**	

#### Definition

The B.C. Government's Energy Plan defines BC Clean Electricity as alternative energy technologies that result in a net environmental improvement relative to existing energy production. Examples may include hydro, wind, solar, photovoltaic, geothermal, tidal, wave and biomass energy, as well as cogeneration of heat and power, energy from landfill gas and municipal solid waste, fuel cells and efficiency improvements at existing facilities. For BC Hydro this means commitments made after November 2002 for new green or clean energy projects that meet the guidelines as listed above, or energy efficiency improvements at existing facilities that came into service after that date. The Clean Energy Target of 50% of new supply is to be achieved over a 10-year period. The annual results will tend to fluctuate based on updates to the load forecast, and timing, volume and type of actual supply delivered.

#### **Variance Explanation**

- \* The figure 61% represents the acquired Clean Energy of 872 GWh against the planned incremental load, after Power Smart, of 1,438 GWh. Since the formulation of the plan, there has been a significant increase in our demand requirements, as reflected in the load forecast in January 2005. As a result, our annual target of incremental load, after Power Smart, was revised from 1,438 GWh to 2,463 GWh.
- \*\*Based on this revised incremental load, the Clean Energy acquired in 2004/2005 was only 35%. BC Hydro is on track with planned acquisition calls in 2005 and 2006 to achieve the 50% target within the 10-year horizon.

#### Benchmark Comparison

No benchmark data available.

#### Use of EcoLogo

The Environmental Choice Programs (ECP) has been adopted as BC Hydro's third-party certification process to evaluate Independent Power Producers (IPP) green power facilities. The ECP uses renewable low-impact criteria to assess existing and new IPP facilities. Facilities meeting ECP criteria for electricity will be eligible to use the EcoLogo mark, indicating their facilities generate "green power." ECP has criteria to assess water-powered, biogas-fuelled, biomass-fuelled, solar-powered and wind-powered generators. The evaluation occurs when the facility is operational which means that not only is the facility required to meet existing provincial regulatory requirements, but it must demonstrate that it operates in an environmentally responsible manner as well.

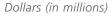


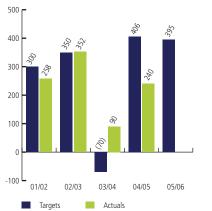
BC Hydro has two financial long-term goals:

- Maintain our existing North American competitive position of average electricity unit costs.
- Deliver 100 per cent forecast net income on an annual basis (after adjustments to water volatility, etc.).

Achieving these financial goals will be challenging, considering variables such as the success of our long-term outsourcing contracts, Powerex's trading activities, load growth, market prices for energy and executing cost-effective plans for maintenance of aging assets. We will be prudent in planning and invest wisely to ensure that we continue to be a low-cost, reliable energy provider over the long term and are able to meet our financial targets. Highlights of our performance in support of these goals are included in this section of the report.

### Net Income before Regulatory Account Transfers





#### **Definition**

Net Income is the total revenue less total expenses before transfers to regulatory accounts. The targets are based on current cost and revenue drivers and the impact that cost reduction and/or revenue enhancement initiatives will have on these drivers.

#### **Variance Explanation**

Net Income is lower than target due to:

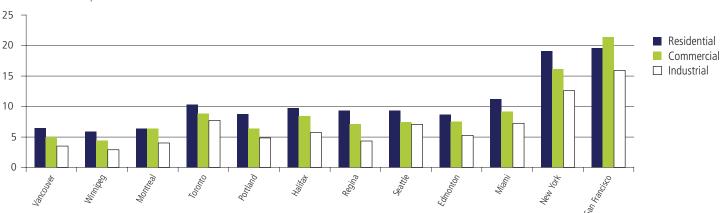
- Lower revenues than plan due to lower final rate set by B.C. Utilities Commission than had been approved on an interim basis and significantly lower trade sales volumes, partially offset by greater activity in the commercial sector;
- Higher costs of energy due to lower hydro generation and overall net increase in purchases to service domestic load at a higher cost than plan price;
- Higher overall operating costs and finance charges; and
- Results positively impacted by receipt of \$137 million from Alcan Inc.

#### **Benchmark Comparisons**

No benchmark data available.

#### **Comparison of Average Rates**

Canadian Cents per Kilowatt Hour

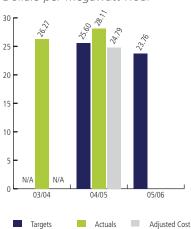


Note: The source for all data, except for Vancouver, is "Hydro-Quebec: Comparison of Electricity Prices in Major North American Cities." (April 1, 2004). The rates for Vancouver have been recalculated based on the BCUC November 2004 BC Hydro Revenue Requirement Decision, which granted a 4.85% rate increase effective April 1, 2004.



### Cost of Heritage Electricity to Distribution

Dollars per Megawatt Hour



#### Definition

Subsequent to publishing BC Hydro's February 2004 Service Plan, the measures related to the Generation Line of Business (LOB) net income and cost per megawatt hour have been modified to reflect the Heritage Contract. As well, the methodology for allocating finance charges to the LOBs (including Generation) has changed since the publishing of the 2004 Annual Report where \$25.93/MWh for 2003/2004 was quoted. Generation currently uses two related measures: Unit Cost of Heritage Electricity to Distribution expressed in dollars per MWh; and, the Adjusted Cost of Heritage Electricity to Distribution.

The actual cost of Heritage Electricity to Distribution is computed by dividing total Generation net costs (all costs less Skagit and miscellaneous revenues plus return on equity) by the volume of electricity supplied to Distribution. The second measure removes cost of energy variances related to changes in load from plan and costs eligible for transfer to regulatory deferral accounts.

#### **Variance Explanation**

Actual costs are over plan, due to increased deliveries to Distribution, that resulted in increased electricity purchases at higher unit costs than plan, offset by below plan depreciation, finance charges and taxes. The adjusted cost of heritage electricity variances are a result of below plan depreciation, finance charges and taxes.

#### **Benchmark Comparisons**

No benchmark data available.

#### **Billed Sales by Region**

Percentage of Total Sales

	04/05	03/04	02/03	01/02	00/01	99/00	98/99	97/98	
Lower Mainland	47.10	47.50	47.50	47.60	46.60	47.00	46.70	48.50	
Northern Region	19.20	18.70	18.50	18.70	19.40	20.00	20.10	20.20	
Southern Interior	12.30	12.50	12.50	12.60	12.30	10.90	11.60	11.80	
Vancouver Island	21.40	21.30	21.50	21.10	21.70	22.10	21.60	19.50	
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	

Billed sales are not weather adjusted and include sales to other utilities. BC Hydro's total billed sales increased by about 1.6 per cent between 2003/2004 and 2004/2005 and since 1997/1998 total billed sales have increased by about 17 per cent. The increase in sales this year over last fiscal reflects a recovery in B.C.'s economy and strong growth in sales to BC Hydro's industrial customers.

The Lower Mainland has the largest share of total billed sales, as most of BC Hydro's customers reside in the Lower Mainland. Changes in billed sales in the northern and southern regions are influenced by changes in B.C.'s economy and changes in commodity exports prices. Of the major four regions, the largest increase in billed sales between 2003/2004 and 2004/2005 occurred in the northern region. As a result, the share of total sales in the northern region increased compared to its share last fiscal year. This reflects stronger growth in sales to the metal mining and wood sector as prices for these commodities were relatively strong in 2004/2005. Sales to Vancouver Island increased by 1.8 per cent over the previous fiscal due to an increase in sales to the pulp and paper sector. Sales to the other regions grew modestly and their share of the total billed sales declined slightly compared to last fiscal.



#### **Total Payroll and Total Benefits, by Region**

**TOTAL** 

Number of Employees						
By Region	04/05	03/04	02/03	01/02	00/01	99/00
Lower Mainland	2,898	3,210	4,507	4,603	4,410	4,057
Vancouver Island	393	410	559	562	550	539
Northern Region	401	402	467	472	470	469
South Interior	534	546	657	666	643	645
TOTAL	4,226	4,568	6,189	6,303	6,073	5,710
% increase/decrease	-7.49 %	-26.19 %	-1.81 %	3.79 %	6.36 %	
Labour Costs, by Region (excluding benefits)						
Dollars (in millions)	04/05	03/04	02/03	01/02	00/01	99/00
Lower Mainland	256	260	318	311	281	261
Vancouver Island	31	31	36	36	34	35
Northern Region	32	33	35	33	31	31
South Interior	43	43	46	43	40	41
TOTAL	362	367	435	423	386	368
% increase/decrease	-1.36 %	-15.63 %	2.84 %	9.59 %	4.89 %	
Estimated Benefits Costs, by Region						
Based on Labour Percentages	34.8 %	32.4 %	28.3 %	25.5 %	24.9 %	24.7 %
Dollars (in millions)	04/05	03/04	02/03	01/02	00/01	99/00
Lower Mainland	89	84	89	79	69	64
Vancouver Island	11	10	11	9	9	9
Northern Region	11	11	10	9	8	8
South Interior	15	14	13	11	10	10

Figures do not include B.C. Transmission Corporation or Accenture Business Services for Utilities. Labour costs shown are as per the Financial Information Act.

119

123

126



#### FINANCIAL, OPERATIONAL, LEGAL AND REGULATORY

Financial results are discussed in detail in the Management Discussion and Analysis section of this report on page 69.

#### **Revenue Requirements Application**

The BCUC conducted a hearing in May and June of 2004 to review BC Hydro's Revenue Requirements application for an 8.9 per cent rate increase in fiscal 2005 and a zero per cent increase in fiscal 2006. The BCUC decision resulted in a rate increase of 4.85 per cent effective April 1, 2004, and approved many important cost items we had asked for, including the results of our last green power generation call and the resources needed to maintain and upgrade our electricity infrastructure. The approved rate increase is sufficient to allow us to operate our business in a manner that is consistent with the company's goal of providing reliable power, at low cost, for generations and will not change how we approach the new long-term goals that have been developed.

BC Hydro received 74 directives from the BCUC in its decision on our fiscal 2005 and 2006 revenue requirements application. We have addressed or are in the process of responding to the time-specific directives. The majority of the remaining directives will be dealt with in the next revenue requirements application, for which we have already started to plan.

#### Water Supply and Reservoir Storage

Our largely hydroelectric generating system is heavily dependent on rainfall, snowpack and reservoir levels to meet our financial targets. The water supply into BC Hydro reservoirs was 97 per cent of average for the year ended March 31, 2005. The current snowpack is near normal to slightly below normal for the Peace River and Upper Columbia River watersheds. Heavy rains in October 2004 and January 2005 washed away much of the snowpack on Vancouver Island and the Lower Mainland. and the current snowpack is at a record low for these areas. Based on snowpack conditions as of March 31, 2005 the BC Hydro system water supply forecast for April to September 2005 is 92 per cent of average. This includes the Peace River at 98 per cent, the Upper Columbia River at 91 per cent and extremely low forecasts for Vancouver Island and the Lower Mainland.

BC Hydro total reservoir storage on March 31, 2005, was about 21 per cent above average and much above the storage level in March 2004. Market purchases and summer rains over the Peace River and Columbia River basins helped bring storage from much below average up to average by October 2004. The heavy winter rains that washed away the snowpack in coastal areas also helped fill the reservoirs.

#### **Capital Projects**

A number of significant capital projects are underway related to our dams and generating facilities that address end of life, reliability, efficiency and safety concerns. Successful implementation of these projects will also help us manage our overall ecological footprint by allowing us to continue to access electricity from existing sources. These projects include:

- Mica G1 to G4 Stator Replacement total cost: \$77.6 million
- The generators for all four Mica units have experienced problems over the years that have resulted in progressive damage to the stator (the stationary part of the generator) core. A major replacement project is underway to purchase and install new stators for each unit, beginning with Unit 4 replacement in fiscal 2006.
- Peace Canyon Stator Replacement total cost: \$63.2 million
- The Peace Canyon generators have had a history of operational and maintenance problems since commissioning in 1979/1980. Negotiations with the original equipment manufacturer to replace all four stators are underway, with replacement anticipated over the period of fiscal 2007 to 2010.



- Coquitlam Dam Seismic Improvements total cost: \$42.9 million
- The Coquitlam Dam is located near the City of Port Coquitlam. Earthquake standards have become more stringent and earthquake criteria have increased, as has the downstream population at risk. Previous investigations have determined that the dam contains loose materials. which are expected to liquefy during a moderate to large earthquake, resulting in large deformations of the dam. After extensive studies, the construction of a new, seismically stable dam just downstream of the existing dam is the preferred, technically acceptable option with the lowest cost and lowest environmental impacts. Construction of the new dam is expected to be complete by the end of calendar 2006

#### **Legal and Regulatory**

Powerex continued to defend itself in a number of lawsuits and regulatory proceedings in which it, along with other energy providers, has been named and that allege that the California wholesale electricity markets were unlawfully manipulated and that energy prices were not just and reasonable during part of 2000 and 2001. While Powerex has already been cleared of all allegations in various regulatory and legal forums, Powerex continues to protect its interests as various cases and proceedings are appealed and new initiatives are launched. These legal and regulatory processes are expected to take some time to conclude.

In March 2005 BC Hydro filed a proposal with the BCUC in response to their directives for BC Hydro to develop an action plan for changes to the delivery of engineering services that would culminate in open competitive processes or outsourcing. This submission identified key principles that BC Hydro would follow in determining the right balance of internal core engineering services with the use of external engineering resources to ensure that the BC Hydro assets are maintained in an efficient, cost-effective, safe and environmentally sound manner. We proposed to present our preferred option to the BCUC by September 1, 2005. The BCUC subsequently provided BC Hydro with a choice of revising our fundamental principles to comply with their directives or to continue to pursue our proposal and have the results integrated into our next revenue requirement application for consideration by the Commission. BC Hydro responded to the BCUC on March 24, 2005, electing the latter option.

#### **Standards of Conduct Application**

To comply with an open access non-discriminatory transmission policy set out in the Energy Plan, BC Hydro filed a proposal with the BCUC in the fall of 2004 that established Standards of Conduct to manage our use of confidential information with respect to work done by BC Hydro for BCTC and vice versa. A "no conduit" policy was proposed which would prohibit BC Hydro personnel from passing on any confidential transmission-related

information they receive from BCTC to others within BC Hydro or to Hydro's marketing affiliates involved in electricity trading. This application to the BCUC was necessary to further ensure that BC Hydro's marketing affiliate would not obtain a competitive advantage in the marketplace over non-affiliates. The BCUC approved these standards of conduct in early 2005 without any requests for further information or process. A compliance program has been developed to implement these standards, focused on our values of integrity, honesty and trust as essential elements of our business success.

### Stepped Rates / Time of Use Rate Option

In early March 2005 BC Hydro filed its application with the BCUC to serve transmission voltage customers. This application is the culmination of a two-year process that had its genesis in the Energy Plan. New rate structures were to be developed for this customer class that would allow them to choose a supplier other than the local distributor and would provide better price signals to large electricity consumers for conservation and energy efficiency. The BCUC held a hearing in the summer of 2003 to develop principles for designing this rate. Extensive consultation with key representatives of this customer group followed in the course of developing the rate proposal now before the BCUC. At a recent BCUC meeting, these customers voiced their appreciation for BC Hydro's efforts to take their views



into consideration in designing the rate. We are hopeful that a negotiated settlement process will be possible as a result of the extensive stakeholder engagement undertaken.

The rate proposal offers transmission voltage customers a stepped rate with a time-of-use rate option. BC Hydro expects most of these customers will select the former rate, where the last 10 per cent of the customer's consumption is charged at a rate that reflects the cost to BC Hydro of acquiring new supply, and the first 90 per cent of normal energy consumption will be charged at a rate calculated to yield the same customer costs currently charged. The result is a revenue neutral rate so that, in aggregate, customers will pay no more for their electricity than they were paying under the old rate for their class.

### Resource Expenditure and Acquisition Plan Application

Also in March 2005, BC Hydro filed our 2005 Resource Expenditure and Acquisition Plan for approval with the Commission. This application provides details on our plans for upcoming capital expenditures for fiscal 2006 and 2007; a proposed fiscal 2006 open call for 800 GWh of firm energy from larger independent power producers and up to 200 GWh of energy from small producers; a description of expenditures linked to existing electricity purchase agreements; and a two-year demand-side management plan. The BCUC has determined that the review of this application will commence with a written

process, to be followed by an oral hearing limited to issues that have not been fully addressed or resolved. As a result of BC Hydro's decision to abandon the Duke Point Power Project, the application may need to be revised.

#### BC Hydro Interconnected Operations Service / BCTC Open Access Transmission Tariff Applications

BC Hydro filed an application, heard concurrently with BCTC's Open Access Transmission Tariff application, to provide BCTC with generation resources, defined as Interconnected Operations Services, that BCTC needs in order to provide ancillary services to its transmission customers. This application set out the rates, terms and conditions of providing this service and the ability of BC Hydro to self-supply when BCTC's tariff is in place. The majority of the issues associated with our application were subsequently negotiated with BCTC so that by the time the BCTC hearing commenced in late February 2005, only two issues remained to be decided by the BCUC. BC Hydro participated in BCTC's tariff hearing, making representations regarding several issues that could potentially create substantial costs or lost revenues for some of our ratepayers.

#### **KEY BUSINESS ALLIANCES**

#### **Accenture Business Services for Utilities**

BC Hydro has now completed Contract
Year 2 of the 10-year outsourcing
agreement with Accenture Business Services
for Utilities (ABSU). ABSU assumed
responsibility for the performance of certain
functions for BC Hydro on April 1, 2003.
These functions include: Customer Services,
Information Technology, Human Resources,
Financial Systems, Purchasing, and Building
and Office Services. The agreement
represents a commitment on BC Hydro's
part to outsource services of \$1.27 billion
over 10 years in exchange for contractually
committed savings of \$250 million over
the same period.

BC Hydro continues to receive service on most of the defined metrics at the levels received prior to the outsourcing agreement and, in some cases, service has exceeded past levels. Financially, the actual expenditure for in-scope services for Contract Year 2 was \$133.3 million, indicating that savings of \$19.3 million were realized this year, net of growth in the business and service consumption.

#### British Columbia Transmission Corporation (BCTC)

BCTC is regulated by the BCUC and is responsible for planning, operating and managing the transmission system. BC Hydro retains ownership of the transmission system. At the end of the 2005 fiscal year, we signed service level agreements with BCTC.



## Report on performance Enablers

Enablers help others to achieve their potential. BC Hydro has two Enabler long-term goals:

- The Western Opportunities goal is to increase profits through expanding Powerex's business activities and through optimization of BC Hydro's current and future assets.
- The Innovation and Technology goal is to be an industry leader in innovation and use of new technology, directly supporting and advancing BC Hydro's other long-term goals.

BC Hydro, through Powerex, will act on western market opportunities to identify additional energy supplies within B.C. for export and continue providing the trade revenues and profits that help to keep rates low and allow the provincial government to invest in services for British Columbians. Leveraging BC Hydro's low-cost hydroelectric resources and interconnections with western Canada and the Pacific Northwest will be areas of focus.

Technological innovation and research and development will be key levers to achieving our other long-term goals and improving our triple bottom line performance. Powertech, our research and engineering subsidiary, and our Engineering LoB will play key roles in advancing these goals and building a culture of innovation across the company. Highlights of our performance in support of these goals are included in this section.

#### **EXPANDING WESTERN BUSINESS OPPORTUNITIES**

#### **Powerex Expands Trading and Sales**

In fiscal 2005 Powerex continued to benefit from a number of Information Technology initiatives focused on enhancing trading performance, improving operational efficiencies and reducing risk. Specifically, Powerex completed or began implementation of systems and integration to advance its market and credit risk management capabilities, support collaboration and records management requirements, address scheduling and regulatory changes, refine business process automation and increase trading in new and existing markets.

During the year, Powerex established new trade activities in all regions, increased gas trading, made improvements in operational efficiency and continued its strong financial performance. Powerex also continued to build on its relationships with B.C.-based Independent Power Producers (IPPs) with the purchase of almost 1,500 GWh. The energy supplied by green IPPs in B.C. supported the sale of up to 30,800 Green Power Certificates (equivalent to the green attributes and emission reductions from 30,800 MWh of green power generation) to one of Powerex's key U.S. customers.

In support of the Western Opportunities goal, in fiscal 2006 Powerex anticipates increasing sales volumes to 31,000 GWh through continued sales to its traditional western North American markets and expansion of its activities in other North American markets. Powerex also plans to increase trading in natural gas markets.



## Report on performance Enablers

#### INNOVATION AND NEW TECHNOLOGY

#### **Innovation at Powertech**

Recognized worldwide for its expertise in solving complex technical problems, Powertech is helping us become a leader in innovation and the use of new technology. For example, it has developed a commercial suite of leading-edge dynamic security assessment (DSA) software tools to address the growing need for advanced power system analysis capabilities. The capability to conduct comprehensive DSA means that systems can be designed and operated to avoid major system upsets and perhaps even blackouts. The economic benefit of avoiding these types of events is enormous. System operators can also use the software to perform "what if" scenarios in order to operate the system. DSA PowerTools™ software has been licensed to more than 40 utilities and system operators worldwide as well as more than 20 universities and research institutes

Powertech is now positioned as a leader in providing high-level technical services to the energy sector as a whole. New technology and innovation in areas such as hydrogen storage and delivery, including testing and certification of tanks, valves and regulators, are now part of Powertech's offerings.

Powertech has also expanded into the automotive industry, supporting the innovation of alternative energy vehicles, including fuel cell technology. The potential for a hydrogen economy continues to develop, as evidenced by the fact that essentially all of the automakers in the world are working on the development of hydrogen fuel cell vehicles as the replacement for internal combustion engines.

#### Innovation at BC Hydro

BC Hydro's Hydrogen and Fuel Cell Program saw continued success during fiscal 2005. This program explores the hydrogen market and forms key relationships to stimulate the development of a hydrogen economy in B.C. Results included:

- constructing a temporary hydrogen fuelling station in Victoria at BC Transit
- fully commissioning and beginning field tests on a fuel cell-based emergency standby generator at a microwave repeater station at our Edmonds facility
- examining the integrating of hydrogen with renewable power generation in remote non-integrated areas and obtaining support from General Electric
- leasing a Ford fuel cell car and assisting in the development of a hydrogen and fuel cell strategy and implementation plan for the province

We also developed an innovative tool that will allow for the safe cleaning of energized equipment of up to 500,000 volts using dry ice pellets of carbon dioxide (CO<sub>2</sub>) as a cleaning agent. This tool will minimize the requirement for outages, increasing system availability and reliability.

Working in co-operation with suppliers, we developed a connector that will be a major component of the replacement program for problematic mid-span connection splices in conductors. This innovation will significantly reduce the time required to replace these connections because it allows for elimination of some components of the process that would otherwise be required to replace these splices. Use of this connector also provides a viable option for this work to be performed on energized high-voltage lines thereby increasing system reliability and availability.



#### **OVERVIEW**

The Provincial Government has established guiding principles on corporate governance for its Crown agencies that describes roles, responsibilities and accountabilities. A *Shareholder's Letter of Expectations* describes the relationship between Government as Shareholder and BC Hydro on issues of mandate, performance expectations, public policy and strategic priorities. This Letter is reviewed annually, updated as required and signed by the Chair on behalf of the Board of Directors of BC Hydro and by the Minister of Energy and Mines as Government's representative.

BC Hydro's governance framework was originally adopted in 1998 and has been regularly reviewed since that time to ensure its various components meet the Corporation's ongoing business needs from a governance perspective while being consistent with Government's guiding principles on Crown agency corporate governance.

#### **BOARD OPERATIONS**

Board and Committee meetings are scheduled together on a quarterly basis to make the best use of the time of all those involved. Time is also allotted during the quarterly session for continuing Director education. This tutorial provides an opportunity for ongoing Board development – either to discuss strategy, a complex business issue or a specific aspect of the Corporation's operations.

Through its Committees (see page 61), the Board of Directors has been kept regularly informed of business issues during the past year, with continued focus on operational risk. Significant changes to accounting practices and principles, or related legislation, is presented to the Board or its Committees as they develop.

As with any business there are times when special Board meetings are required during the year outside the regular meeting schedule to address a particular business issue. A number of special meetings were necessary during the past year.



#### **ENVIRONMENTAL OVERSIGHT**

The Board of Directors expects assurance that processes are in place to assure environmental compliance and that any deviation is identified in a timely way and reported to the Audit and Risk Management Committee, the Board Committee assigned with this responsibility.

At a special environmental briefing session last summer, Directors reviewed environmental management, current trends and triple bottom line decision-making in more depth. Looking at the continuum of environmental leadership, the Board considered where the Corporation is currently placed – as well as where it could be in the future

### SECURITY AND EMERGENCY PREPAREDNESS

The Chief Risk Officer reports quarterly to the Board on the status of security measures in place at all levels of the organization.

Last October Directors had the opportunity to visit the Corporate Emergency Centre at BC Hydro's Edmonds facility in Burnaby where an exercise simulating a magnitude 7 earthquake was underway. Exercise Energy Challenge was an exercise developed by BC Hydro, B.C. Transmission Corporation, Terasen Gas and Duke Energy that assisted in evaluating procedures for responding to large-scale emergency events.

The Board was not only able to see firsthand how BC Hydro would respond while communicating with the emergency services, customers, stakeholders, the media and our employees, but received the assurance that effective planning, so far as possible, is in place to respond to a large-scale emergency.

#### STRATEGY FORMULATION

The Corporation's long-term strategy was thoroughly reviewed at the Board's annual Retreat held in Prince Rupert last summer, culminating in the Board's formal endorsement last fall of BC Hydro's long-term goals and new purpose statement – "reliable power, at low cost, for generations."

During its Retreat weekend, Directors and senior management had the opportunity to meet with local community leaders in Prince Rupert at a reception hosted by the Board. Time was also set aside for a fly-over of some of the more remote communities north and west of Prince Rupert which BC Hydro serves, providing the Board with insights into the special challenges faced by our employees in "keeping the lights on."

### FINANCIAL WHISTLEBLOWER PROTECTION

Adopted in 1998, BC Hydro's *Director and Employee Code of Conduct* provides the means for confidential disclosure on any Code issue to an independent Code of Conduct Advisor when events warrant.

In the spirit of U.S. Sarbanes Oxley legislation, certain aspects of which the Board views as best practice, new processes to deal with whistleblower protection for any audit or accounting impropriety were

incorporated into the *Code of Conduct* earlier in 2004. In the event a complaint is received, the Audit and Risk Management Committee is advised and the Committee concerned (whether it be the Audit and Risk Management Committee of BC Hydro or Powerex Corp.) will direct further investigation and follow-up consistent with these new quidelines.

#### **CONTINUOUS IMPROVEMENT**

Subscribing to the principle of continuous improvement, Board performance is evaluated annually to assure that the Board of Directors performs its due diligence and policy oversight role in the most effective manner.

With the benefit of ongoing examination, awareness of best practices and benchmarking of other organizations, Directors are assured that BC Hydro's governance framework is appropriate. However, the Board understands that while process and structure drive good governance, success is only assured when the appropriate behaviors, attitudes and leadership are demonstrated at all levels of the organization.

During the past year an assessment of the Board's competency base was undertaken to confirm that the Board of Directors as a whole has the appropriate balance of skills and experience to provide balanced oversight consistent with the Corporation's strategic direction. The Corporate Governance Committee undertook this responsibility, the outcome of which will be an effective planning tool for long-term Board renewal.



#### GOVERNANCE AND DISCLOSURE GUIDELINES FOR BRITISH COLUMBIA PUBLIC SECTOR BOARDS

Looking to the future, the Board has reviewed Government's new *Best Practice Guidelines on Governance and Disclosure* issued in February 2005. Organizations are requested to meet the disclosure standards by April 2006 and BC Hydro will work to that end, publishing its disclosure on **www.bchydro.com**.

For more information on the *Shareholder's Letter of Expectations*, the *Director and Employee Code of Conduct*, BC Hydro's Board of Directors, its Committees and Subsidiary appointments, visit our website.

#### **Footnotes**

#### Committees of the Board of Directors

Committees of the Board of Directors of BC Hydro are composed entirely of independent Directors.

The Peace River/Williston Reservoir Advisory Committee is composed of local community members and chaired by an independent member of the BC Hydro Board.

The Board of Directors of BC Hydro's wholly owned subsidiary, Powerex Corp., has also appointed an Audit and Risk Management Committee composed of independent Directors.

#### Board and Committee Meetings held from April 1, 2004 - March 31, 2005

#### **BC** Hydro

Quarterly and Special Board Meetings – 11

Strategic Retreats - 1

Executive Committee\* - 0

(\*meets by exception. No meetings required)

Audit and Risk Management Committee – 5

Human Resources Committee - 4

Corporate Governance Committee – 3

Peace River/Williston Reservoir Advisory Committee - 4

#### Powerex Corp.

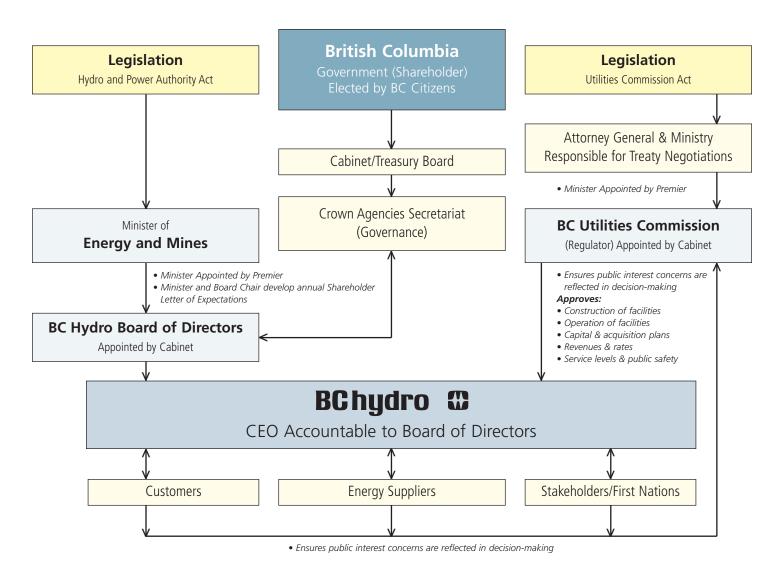
Quarterly and Special Board Meetings – 8 Audit and Risk Management Committee – 5

#### Powertech Labs Inc.

Regular Board Meetings – 4 Strategic Retreats – 1



### BC Hydro Shareholder-Regulatory Relationship Framework



As a provincial Crown corporation, BC Hydro has a number of important reporting relationships within the overall provincial government structure. These are detailed in the above chart. Included are the direct reporting relationship to the Minister of Energy and Mines, the governance function of the Crown Agencies Secretariat and the role that our regulator — the B.C. Utilities Commission — plays on behalf of the interests of our customers.



### ACCOUNTABILITY FOR SUSTAINABILITY

The Vice-President of Sustainability is accountable for BC Hydro's external sustainability focus, while the Senior Vice-President, Distribution is accountable for enabling the implementation of sustainability within BC Hydro. Each Line of Business (LoB) is responsible for the implementation of sustainability through the LoBs' sustainability groups. The Sustainability Managers' Committee, a cross-LoB management team, meets monthly to identify areas and opportunities for implementing and integrating sustainability within BC Hydro. Reporting on environmental risk is met through the Quarterly Risk Report which is provided to the Risk Management Committee and the Audit and Risk Management Committee of the Board.

All executive and management bonuses (variable pay) are based on achievement of BC Hydro's performance targets, as approved by the Board of Directors.

External inputs into BC Hydro's business decisions are obtained through the newly formed Stakeholder Engagement group, who incorporate the needs and expectations of our stakeholders into our triple bottom line decision-making processes so that the public understands and are consulted regarding BC Hydro's business decisions.

As an example of how triple bottom line (TBL) values are being factored into our decision-making, BC Hydro owns lands around Sugar Lake Reservoir in the Shuswap area that are surplus to our current requirements. Surplus real estate decisions are typically driven by financial considerations. However, BC Hydro does consider a triple bottom line focus in its surplus real estate decision-making process, if appropriate. For the Sugar Lake lands, a Valuation Pilot Program was set up to review and consider possible methodologies to measure the impacts of the environmental and social attributes of real estate decision-making versus traditional financial decision-making attributes.

The purpose of the pilot was to see if these TBL valuations resulted in a different development option being selected than that using a purely financial analysis. BC Buildings Corporation and B.C. Ministry of Water, Lands and Air Protection were consulted as partners in this pilot to maximize the alignment of any new valuation methodology with what is in use or may be in use in the future with other Crown corporations and provincial government agencies. The first phase of the project, involving partnering and inventory of environmental and social attributes, has been completed. The next two phases, which involve refinement of various development scenarios, data and evaluation, are underway and will be completed in the next fiscal year. A final decision on the disposal or development of the property will follow.



# 2005 Statement of Corporate Governance Practices Directors, Officers and Senior Management of BC Hydro

#### **BOARD OF DIRECTORS**

Lawrence I. Bell

Stephen T. Bellringer

Wanda C. Costuros

Elmer P. Derrick

Kenneth J. Finch

Alice D. Laberge

Nancy D. Olewiler

Peter J. Powell

Walter Saponja

Jack Weisgerber

#### OFFICERS AND SENIOR MANAGEMENT

Lawrence I. Bell

Chair

Robert G. Elton

President and Chief Executive Officer

Dawn Farrell

Executive Vice-President, Generation

Raymond A. Aldeguer

Senior Vice-President, Corporate

Resources and General Counsel

**Bev Van Ruyven** 

Senior Vice-President, Distribution

**Dennis Maniago** 

Vice-President, Field Services

(Retired effective March 31, 2005)

W. Bruce Sampson

Vice-President, Sustainability

**Bruce Ripley** 

Vice-President, Engineering

**Alister Cowan** 

Executive Vice-President, Finance and Chief Financial Officer

(Effective August 16, 2004)

Nicola Webb

Chief Human Resources Officer

Ken Pawluk

Controller

(Effective October 1, 2004)

Jay Grewal

Director, Business Partnerships

Yale Loh

Treasurer (Acting)

(Effective November 26, 2004)

Warren McKay

Chief Information Officer

Myra E.M. Watson

Corporate Secretary

**Debbie C. Lamming** 

Assistant Corporate Secretary (Resigned March 11, 2005)



# 2005 Statement of Corporate Governance Practices Committees of the Board of Directors

#### **EXECUTIVE**

Lawrence I. Bell Chair

#### Alice D. Laberge Jack Weisgerber

This Committee has a unique responsibility and only meets in special circumstances. It has the full powers of the Board to act in situations when, for timing reasons, a Board meeting cannot be scheduled.

#### **AUDIT & RISK MANAGEMENT**

Wanda C. Costuros

Chair\*

Alice D. Laberge Nancy D. Olewiler Peter J. Powell Walter Saponja

This Committee assists the Board in fulfilling its obligations and oversight responsibilities relating to the audit process, financial reporting, the system of corporate controls, governance of the Corporation's pension plans, and various facets of risk management.

\*Committee Chair an ex-officio member of the Corporate Pension Management Committee.

#### **CORPORATE GOVERNANCE**

Nancy D. Olewiler

Chair

Stephen T. Bellringer Wanda C. Costuros Elmer P. Derrick

This Committee assists the Board of Directors by ensuring that BC Hydro develops and implements an effective approach to corporate governance which enables the business and affairs of the corporation to be carried out, directed, and managed with the objective of enhancing shareholder value.

#### **HUMAN RESOURCES**

**Stephen T. Bellringer**Chair

Elmer P. Derrick Kenneth J. Finch Alice D. Laberge Jack Weisgerber

This Committee assists the Board in fulfilling its obligations relating to senior management human resource, compensation and safety issues.

#### **ADVISORY COMMITTEE** – Peace River / Williston Reservoir

Jack Weisgerber

Chair

Lori Lynn Ackerman

(Fort St. John)

**Don Bourassa** 

(Dawson Creek)

**Rick Hopkins** 

(Fort St. John)

**Gwen Johansson** 

(Hudson's Hope)

**Bob McNabb** 

(Chetwynd)

**Kevin Neary** 

(Mackenzie)

**George Stedeford** 

(Mackenzie)

Leigh Summer

(Hudson's Hope)

**Ron Terlesky** 

(Mackenzie)

**Donny Van Somer** 

(Kwadacha)

The Board appoints Advisory Committees from time to time. This Advisory Committee provides advice and facilitates two-way communication between the Peace/Williston community and BC Hydro. The Chair is a Board member and Committee membership is composed of local community leaders, providing equitable representation from geographical and special interests groups within the region.



#### POWEREX CORP.

#### **BOARD OF DIRECTORS**

Lawrence I. Bell

Wanda C. Costuros

Elmer P. Derrick

Robert G. Elton

Robert A. Fairweather

Nancy D. Olewiler

Kenneth G. Peterson

(Resigned effective December 14, 2004)

Peter J. Powell

Walter Saponja

#### **OFFICERS**

Lawrence I. Bell

Chair

**Teresa Conway** 

Acting CEO

(Permanent appointment May 24, 2005)

**David Wong** 

Vice-President, Finance and Chief

Financial Officer (Acting)

(Effective December 15, 2004)

**Douglas J. Little** 

Vice-President, Marketing and

Trade Policy

Myra E.M. Watson

Secretary

**Debbie C. Lamming** 

**Assistant Secretary** 

(Resigned effective March 11, 2005)

#### **AUDIT & RISK MANAGEMENT**

Peter J. Powell

Chair

Wanda C. Costuros

Elmer P. Derrick

Robert A. Fairweather

Nancy D. Olewiler

Walter Saponja

#### POWERTECH LABS INC.

#### **BOARD OF DIRECTORS**

William A. Best

Kenneth J. Finch

Prabha Kundur

**Bruce Ripley** 

(Effective October 20, 2004)

W. Bruce Sampson

Bev Van Ruyven

#### OFFICERS

#### Kenneth J. Finch

Chair

Prabha Kundur

President

**Peggy MacTavish** 

Director, Business Services

#### Myra E.M. Watson

Secretary

**Debbie C. Lamming** 

Assistant Secretary

(Resigned March 11, 2005)

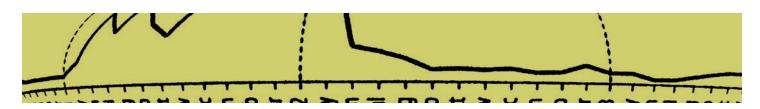


## Corporate Governance Practices Corporate Audit Program

BC Hydro's audit framework incorporates Risk Based and Cyclical Audits, and Fundamental Control Assessments to provide a comprehensive program to support stakeholders assurance needs. These programs are updated on a regular basis with information received from benchmarking, risk assessments and other reporting and monitoring activities. Together this provides support for an effective control environment at BC Hydro across the three bottom lines.

The following table depicts the audits conducted in fiscal 2005.

			CH ORE			J		⊗ ∩
RISK (R) CYCLICAL (C)		LOB	SERVICE ORG	POWEREX	PERFORMANCE MEASURE	ENVIRONMENTAL	<u></u>	3rd PARTY ABSU BCTC
C	ABSU Purchasing							•
C	ABSU Accounts Payable							•
C	ABSU Customer Care Billing Services							•
C	ABSU Service Level Metrics							•
C	ABSU Information Technology							•
R	Asset Management	•						
R	Consultant Procurement		•					
R	Customer Projects	•						
R	Energy Purchasing	•						
C	Environmental Management System - Engineering					•		
C	Environmental Management System - Distribution Maintenance					•		
C	Environmental Management System - Distribution Customer Projects					•		
C	Environmental Management System - Generation					•		
C	Executive and Employee Expense Claims	•						
R	Field Services Workforce Renewal		•					
R	Information Technology Security						•	
R	Major Equipment Procurement		•					
C	Performance Measure Cost per Megawatt Hour				•			
C	Performance Measure Capital, Operating, Maintenance and Administration Cost per Customer				•			
C	Performance Measure New Energy from Clean Energy				•			
R	Powerex Transmission Management			•				
R	Powerex Monte Carlo Value at Risk			•				
R	Powerex Gas Trade Processing			•				
C	Powerex Trade Processing Controls			•				
R	Time Bank and Annual Vacation Liability	•						
	TOTAL	5	3	4	3	4	1	5



BC Hydro 2005 Financial Results



#### Management Discussion and Analysis

The Management Discussion and Analysis reports on BC Hydro's consolidated results and financial position for the year ended March 31, 2005 (fiscal 2005). This discussion should be read in conjunction with the consolidated financial statements of the company and related notes. This report contains forward–looking statements, including statements regarding the business and anticipated financial performance of BC Hydro. These statements are subject to a number of risks and uncertainties that may cause actual results to differ materially from those contemplated in the forward–looking statements.

Effective for fiscal 2005, BC Hydro returned to regulation by the British Columbia Utilities Commission (the Commission) which included application for an increase in rates, as well as the establishment of regulatory deferral accounts. These regulatory impacts affect the comparability of fiscal 2005 results to those achieved in fiscal 2004 and previous years and to the net income forecast provided in BC Hydro's Service Plan dated February 2004.

For fiscal 2005, BC Hydro's results were impacted by increased customer demand due to improved economic conditions in the province. Lower than average water flows meant increased reliance on energy purchases as BC Hydro responded to the increased demand and stored water in its reservoirs whenever possible. Combined with high energy prices in the western North American region, the cost of energy increased significantly as a result. Lower interest rates and a stronger Canadian dollar also impacted the financial results for fiscal 2005.

#### **Highlights**

- Net income for the year ended March 31, 2005 was \$402 million, an increase of \$291 million from the prior year. This resulted in a return on equity of 14.24 per cent compared to 3.74 per cent for fiscal 2004.
- On October 29, 2004, the Commission issued its decision related to BC Hydro's Revenue Requirements Application dated December 15, 2003. BC Hydro was entitled to a rate increase of 4.85 per cent effective April 1, 2004. As a result, BC Hydro was able to earn a level of net income which is more reflective of the allowed return on equity under regulation.
- On December 23, 2004 Alcan Inc. paid Powerex US\$110.4 million (CDN\$137 million), the full value of the arbitration award of US\$100 million plus US\$10.4 million in interest to settle obligations under a Power Purchase and Sale Agreement. The amount of \$137 million is included in earnings in fiscal 2005 and is included in the calculation of the trade income deferral account balance.
- BC Hydro has recently completed the transfer of responsibility for management of BC Hydro's transmission system assets to the British Columbia Transmission Corporation (BCTC), a Crown corporation of the Province. BCTC will manage the transmission assets in order to provide transparent open-access transmission services. The consolidated financial statements of BC Hydro include the accounts of BCTC for the years ended March 31, 2005 and 2004. BC Hydro will remove BCTC from its consolidated accounts effective April 1, 2005 when BCTC is considered operationally and financially independent of BC Hydro.

(dollar amounts in millions)	2005	2004	Change
Total Assets	\$ 12,163	\$ 11,838	\$ 325
Total Equity	\$ 1,688	\$ 1,876	\$ (188)
Net Income	\$ 402	\$ 111	\$ 291
Payment to the Province	\$ 339	\$ 73	\$ 266
Return on Equity <sup>1</sup>	14.24 %	3.74 %	10.50 %
Debt to Equity <sup>1</sup>	68:32	70:30	_
Number of Domestic Customers	1,675,055	1,650,482	24,573
GWh Sold (Domestic)	51,205	50,151	1,054

Based on equity as defined for regulatory purposes



### **Consolidated Results of Operations**

Income before regulatory account transfers of \$240 million for the year ended March 31, 2005 compares with \$90 million in the previous year. The primary reasons for the increase in income are the 4.85 per cent rate increase and payment of the arbitration award from Alcan Inc. of \$137 million. Higher revenues resulted from the approved tariff rate increase and continued strong customer demand for electricity in all customer sectors. The arbitration award is discussed in the "Payment from Alcan Inc." section of the Management Discussion and Analysis. These impacts were partially offset by an increase in energy costs as a result of higher purchases due to lower water inflows and higher domestic load. Also impacting income before regulatory account transfers was an increase in operating costs and lower amortization and finance charges.

Net income after regulatory account transfers of \$402 million for the year ended March 31, 2005 compares with \$111 million in the previous year. With the return to regulation and the resulting approval of a tariff rate increase and the regulatory deferral accounts for fiscal 2005, BC Hydro was better able to recover the costs of the regulated operations. As a result, BC Hydro significantly improved its net income over fiscal 2004, earning a return on equity much closer to the return allowed under regulation. Management expects this to continue into the future as BC Hydro remains under regulation by the Commission. Note that a significant portion of the increased energy costs and the Alcan payment are transferred to the regulatory deferral accounts.

#### Revenues

	in r	in millions		att hours
	2005	2004	2005	2004
Domestic:				
Residential	\$ 1,016	\$ 960	15,814	15,646
Light industrial and commercial	967	912	17,459	17,175
Large industrial	573	525	16,177	15,505
Other energy sales	148	\$ 156	1,755	1,825
	\$ 2,704	\$ 2,553	51,205	50,151
Trade	1,021	871	29,706	28,373
Total	\$ 3,725	\$ 3,424	80,911	78,524

#### **Domestic Revenues**

Domestic revenues of \$2,704 million for the year ended March 31, 2005 were \$151 million higher than the previous year. Key factors in this increase are the 4.85 per cent rate increase effective April 1, 2004 and net growth in domestic demand of two per cent compared to the previous year. Residential demand has increased compared to the prior year due to 22,260 additional customers. This increase has been partially offset by a decrease in residential consumption primarily due to temperatures averaging four per cent warmer than the prior year. Consumption in the large industrial and the light industrial and commercial sectors has increased by three per cent as activity levels have increased due to improved economic conditions in the province.



#### **Trade Revenues**

BC Hydro's electricity system is interconnected with systems in Alberta and the western United States. Interconnection facilitates sales and purchases of electricity outside of British Columbia. Energy trade activities are carried out by Powerex, a wholly owned subsidiary of BC Hydro. Trade activities help BC Hydro balance its system by being able to import energy to meet domestic demand when there is a supply shortage in the system due to such factors as low water inflows. Exports are made only after ensuring domestic demand requirements can be met.

Trade revenues for the year ended March 31, 2005 were \$1,021 million compared to \$871 million in the prior year. A portion of the increase was due to a three per cent increase in average sales prices to \$63/MWh from \$61/MWh in the prior year. The increase in market prices was caused by several factors including lower water flows resulting in less energy available from low-cost hydro generation in the region and tighter natural gas supplies. Sales volumes also increased by five per cent to 29,706 GWh in the year ended March 31, 2005 from 28,373 GWh in the prior year.

### **Energy Costs**

Energy costs are influenced primarily by the volume of energy consumed and the mix of sources of supply. The mix of sources of supply is influenced by variables such as the market price of energy, water inflows, reservoir levels, energy demand and environmental and social impacts.

Energy costs are comprised of the following sources of supply:

	in millions		gigaw	gigawatt hours		\$ per MWh	
	2005	2004	2005	2004	2005	2004	
Hydro	\$ 234	\$ 246	41,161	43,322	\$ 5.69	\$ 5.68	
Purchases from Independent Power							
Producers and other long-term contracts	394	367	6,445	6,133	61.13	59.84	
Other electricity purchases <sup>1</sup>	941	617	37,087	33,491	52.52	49.86	
Natural gas <sup>2</sup>	229	213	781	448	98.59	113.84	
Transmission charges and other expenses	161	137	97	99	_		
Total	\$ 1,959	\$ 1,580	85,571	83,493	\$ 34.66 <sup>3</sup>	\$ 31.54 <sup>3</sup>	

<sup>&</sup>lt;sup>1</sup> Other electricity purchases in dollars includes purchases for trade activities shown net of derivatives. Gigawatt-hours and \$ per MWh are shown at gross cost.

For the year ended March 31, 2005 energy costs of \$1,959 million were \$379 million higher than the previous year. The increase is a result of a higher reliance on electricity purchases due to low water inflows and the management of reservoir levels. This includes electricity imports for fiscal 2005 which were 6,896 GWh compared to 5,349 GWh for the prior year. Lower hydro generation in the western North American region also increased market prices for purchased electricity.

Water inflows into BC Hydro's reservoirs were one per cent lower at March 31, 2005 compared to the prior year. This resulted in a reduction in the volume of low-cost hydro generation. Reduced hydro generation volumes are compensated for by increased electricity imports. The decision to import energy instead of utilizing hydro generation is based on many factors, such as the forecast market price of energy in future periods relative to the current period, current reservoir levels and future demand requirements. Operating constraints related to legal and regulatory obligations such as minimum reservoir levels and stream flow requirements also affect the decision to import energy.

<sup>&</sup>lt;sup>2</sup> Includes costs of remarketed gas of approximately \$152 million for the year ended March 31, 2005 compared with \$162 million for the prior year. The volumes shown for natural gas relate only to gas used for thermal generation.

<sup>&</sup>lt;sup>3</sup> Total cost per MWh includes other electricity purchases at gross cost.

Despite lower inflows, reservoirs have been managed such that the combined storage in BC Hydro reservoirs at March 31, 2005, was 121 per cent of average compared with 92 per cent of average at March 31, 2004 (average storage levels relate to the average from 1985 to 2004), with the Williston Reservoir on the Peace River system at 120 per cent of average (2004 – 97 per cent) and the Kinbasket Reservoir on the Columbia River system at 112 per cent of average (2004 – 56 per cent).

#### Maintenance

Total maintenance costs for the year ended March 31, 2005 were \$17 million lower than the previous year. The decrease was primarily due to the high levels of maintenance performed in fiscal 2004 as a result of forest fire damage.

#### Operations and administration

Total operations and administration costs were \$385 million for the year ended March 31, 2005 compared to \$358 million for the prior year. The increase is primarily due to an adjustment in the provision for contaminated sites (\$24 million), the legal cost provision for California litigation matters (\$22 million), fewer labour vacancies (\$5 million) and higher regulatory costs (\$2 million). The increase in costs was partly offset by reduced IT costs (\$9 million) due to the significant number of projects completed in the prior year and the provision for the Vancouver Island Generation and Georgia Strait Crossing Projects (\$22 million) which was recorded in fiscal 2004.

#### Amortization Expense

Amortization expense for the year ended March 31, 2005 was \$80 million lower than the previous year. The decrease in amortization expense is primarily due to the provision for the Vancouver Island Generation and Georgia Strait Crossing Projects which was recorded in fiscal 2004.

#### Finance Charges

Finance charges for the year ended March 31, 2005 were \$9 million lower than the previous year. The decrease in finance charges is primarily due to lower interest rates on debt refinancing (\$18 million) and a stronger Canadian dollar compared to the US dollar (\$8 million). These favourable variances were partly offset by lower sinking fund income (\$11 million), lower finance charges capitalized (\$2 million), and higher average volume of debt (\$2 million).

### Return on Equity and Payment to the Province

(dollar amounts in millions)	2005	2004	
Actual return on equity <sup>1</sup>	14.24 %	3.74 %	
Allowed return on equity	13.91 % <sup>2</sup>	14.33 % <sup>3</sup>	
Payment to the Province	\$ 339	\$ 73	

<sup>&</sup>lt;sup>1</sup> Based on equity as defined for regulatory purposes.

BC Hydro is required to make an annual Payment to the Province equal to 85 per cent of its distributable surplus.

<sup>&</sup>lt;sup>2</sup> BC Hydro's allowed rate of return was approved by the Commission in its rate decision of October 29, 2004. The allowed return on equity has been calculated to equal, on a pre–income tax basis, that of the most comparable investor–owned utility.

<sup>&</sup>lt;sup>3</sup> BC Hydro's allowed 1995 rate of return was approved by the Commission in its rate decision of November 24, 1994. In subsequent years, rates of return were calculated by BC Hydro using the same method as in 1995.

#### Payment from Alcan Inc.

During fiscal 2002, Enron Corp. and certain of its subsidiaries, including Enron Power Marketing, Inc. (EPMI), filed for bankruptcy protection. Under a 1997 agreement among Alcan Inc., formerly Alcan Aluminum Limited, (Alcan), EPMI, Powerex and BC Hydro, Alcan agreed to remain liable to Powerex for payment obligations of EPMI up to US\$100 million.

On December 23, 2004 Alcan paid Powerex US\$100 million plus US\$10.4 million in interest. The amount of CDN\$137 million is included in earnings in fiscal 2005 and is included in the calculation of the transfer to the trade income deferral account.

### **Comparison with Service Plan**

Each year, BC Hydro's Service Plan is prepared for presentation to the British Columbia Legislature under the Budget Transparency and Accountability Act. The plan outlines BC Hydro's goals, objectives and key strategies, along with the results it expects to achieve for the following three-year period.

In BC Hydro's Service Plan dated February 2004, fiscal 2005 net income was forecast to be \$442 million. In April 2004, to reflect the impact of a revised revenue requirements application and a refined definition of the regulatory deferral accounts, this forecast was revised to \$406 million.

Actual income before regulatory account transfers for the year ended March 31, 2005 was \$240 million which was \$166 million below the revised forecast. The primary reason for the decrease is a lower gross margin on sales (\$302 million) due to a lower approved tariff increase than planned, a higher reliance on energy purchases due to low water inflows and higher energy purchase prices. Operating costs were also higher (\$15 million) than forecast mainly due to an increase in Powerex's provision for legal costs to defend the California litigation. Finance charges were higher than forecast by \$16 million due to lower sinking fund income and lower finance charges capitalized. Offsetting these variances were the payment of the arbitration award from Alcan Inc. of \$137 million and lower amortization (\$29 million) as a result of longer amortization periods on certain assets as directed by the Commission.

The net income impact of a significant portion of the gross margin variance and the Alcan Inc. payment are largely absorbed by transfers to the regulatory deferral accounts totalling \$149 million. As a result, the actual net income was only \$4 million less than the April 2004 revised forecast. Actual return on equity of 14.24 per cent was slightly above the allowed return of 13.91 per cent due to differences between actual and forecast equity for regulatory purposes.

### **Accounting Policies**

### Regulatory Accounting

BC Hydro applies various accounting policies that differ from Canadian generally accepted accounting principles for enterprises that do not operate in a rate-regulated environment. Generally, these policies result in deferral and amortization of costs to allow for their recovery in future rates. These costs would otherwise be included in the determination of net income in the year the cost is incurred. These accounting policies support BC Hydro's regulation and have been established through ongoing application or by approval of the Commission.

### **Changes in Accounting Policy**

During fiscal 2005, BC Hydro implemented the following accounting policy changes:

### **Asset Retirement Obligations**

Effective April 1, 2004 BC Hydro adopted CICA Section 3110 "Asset Retirement Obligations" which addresses accounting and reporting for obligations associated with the retirement of long-lived assets. This new section applies only to legal obligations associated with the retirement of long-lived assets. BC Hydro is required to record the net present value of a liability at the time



it is incurred if an estimate can be determined. When a liability is initially recorded, BC Hydro will capitalize the costs by increasing the carrying value of the long-lived asset. The liability is adjusted for the passage of time through accretion (interest) expense and the asset is amortized over its useful life. The change in accounting policy has been applied retroactively including restatement of prior periods to eliminate the provision for future removal and site restoration costs that was previously reported.

#### Hedging Relationships

During the year, BC Hydro implemented the requirements of CICA Accounting Guideline 13, "Hedging Relationships." This Guideline addresses the types of items that qualify for hedge accounting, including the formal documentation required to enable the use of hedge accounting and the requirement to evaluate hedges for effectiveness. BC Hydro also implemented Emerging Issues Committee (EIC) Abstract 128, "Accounting for Trading, Speculative or Non-hedging Derivative Financial Instruments." The EIC requires derivatives that are not designated as hedges to be recorded at fair value on the balance sheet, with changes in fair value recorded in earnings. The requirements of the Accounting Guideline and EIC were adopted prospectively for derivatives used for liability-management purposes effective April 1, 2004.

### Regulation

Revenue Requirement Application

On October 29, 2004, the Commission issued its decision related to BC Hydro's Revenue Requirements Application dated December 15, 2003. The major impacts resulting from this decision were:

- BC Hydro was entitled to a rate increase of 4.85 per cent effective April 1, 2004. As BC Hydro had charged customers based on an approved interim rate increase of 7.23 per cent effective April 1, 2004, BC Hydro refunded its customers \$38 million, which included interest based upon customers' consumption during the period April 1, 2004 to November 30, 2004.
- The Commission approved the Heritage Deferral Account, the Non-Heritage Deferral Account, and the Trade Income Deferral Account.
- The Commission ordered the establishment of a regulatory provision for future removal and site restoration costs. Dismantling costs incurred due to removal of capital assets and site restoration are charged against the provision if they do not relate to an asset retirement obligation. This provision was established by a transfer from Retained Earnings of \$251 million.

#### Regulatory Deferral Accounts

During fiscal 2004, the Province issued a Special Directive that directs the British Columbia Utilities Commission to authorize BC Hydro to establish the Heritage Deferral Account and the Trade Income Deferral Account effective April 1, 2004. As part of the Revenue Requirement Application related to fiscal 2005 and 2006, BC Hydro also applied to the Commission for the establishment of a Non-Heritage Deferral Account. The Commission approved the accounting requirements related to these accounts in its decision of October 2004. These accounts are intended to result in assigning domestic ratepayers the benefit of BC Hydro's low cost generation assets (the "Heritage Resources") and other related activities, as well as an appropriate share of risks associated with the ownership and operation of these assets.

The Heritage Deferral Account is intended to mitigate the impact of certain variances between the forecast and actual costs of service associated with the Heritage Resources. The Non-Heritage Asset Deferral Account is intended to manage the impact of certain other non-controllable cost variances. The Trade Income Deferral Account is intended to mitigate the uncertainty associated with forecasting the net income of BC Hydro's trade activities. The impact of these accounts is to defer certain types of revenue and cost variances through transfers to/from the accounts by adjustment of net income.



#### Regulatory Provision for Future Removal and Site Restoration Costs (FRSR)

As a result of the Commission's decision in October 2004 and effective April 1, 2004, BC Hydro was required to establish a regulatory provision for future removal and site restoration costs not covered by the asset retirement obligation standards. The initial amount of the provision is \$251 million. Costs of dismantling capital assets will be applied to this regulatory liability if they do not otherwise relate to an asset retirement obligation under Section 3110 of the CICA Handbook.

BC Hydro has recorded the following amounts in the financial statements for the year ended March 31, 2005 including accrued interest on regulatory deferral account balances of \$6 million:

	Income Statement	Balance Sheet
	Year ended	As at
(in millions)	March 31, 2005	March 31, 2005
	Increase (Decrease)	
	Net Income	Asset (Liability)
Heritage Deferral Account	\$ 131	\$ 138
Non-Heritage Asset Deferral Account	128	131
Trade Income Deferral Account	(110)	(114)
Net Regulatory Deferral Accounts	\$ 149	\$ 155
Regulatory Provision for FRSR	\$ 13	\$ (238)

### **Energy Procurement**

### Vancouver Island Call for Tenders

In November 2004, Duke Point Power Limited Partnership (DPP) was selected as the successful bidder under the terms of the Vancouver Island Call for Tenders (Call for Tenders) for a new source of electricity supply on Vancouver Island. The Duke Point Power project was for a gas-fired combined cycle plant to be located near Nanaimo and BC Hydro would hold a contract for 252 megawatts from the project.

In its decision issued in February 2005, the Commission authorized BC Hydro to proceed with execution of the electricity purchase agreement with DPP. Subsequent to the Commission's decision, two intervenors to the regulatory hearing applied to the British Columbia Court of Appeal for leave to appeal the decision. Those applications were dismissed in April 2005. Further applications were filed seeking reconsideration of that dismissal and the Court of Appeal granted leave to appeal on June 14, 2005.

The continuing appeal process has delayed the project to the point where the risks are too great that the project would not be ready on time to ensure the reliability of electricity supply. As a result, on June 17, 2005, BC Hydro announced that it will exercise its contractual right to terminate the agreement, without liability to DPP, apart from the obligation to return performance security and a deposit.

#### Georgia Strait Crossing Project

On December 20, 2004, BC Hydro and Williams Gas Pipeline Company, LLC announced the cancellation of the proposed Georgia Strait Crossing (GSX) pipeline project which had been proposed and under development since fiscal 1999. During fiscal 2004 BC Hydro fully provided for all costs of the project to reflect the uncertainty as to the project proceeding or the costs being recovered. BC Hydro believes the current provision is adequate with respect to any potential losses related to this project including any related contingencies.



### **British Columbia Transmission Corporation**

Under the provincial Energy Plan, the responsibility for the management of BC Hydro's transmission system assets was transferred to the British Columbia Transmission Corporation (BCTC), a Crown corporation of the Province. BCTC will manage the transmission assets in order to provide transparent open-access transmission services.

BC Hydro will retain legal ownership of substantially all of the transmission system assets. BC Hydro is also responsible for funding the purchase costs of additions to and replacements of the transmission assets that it owns. BCTC will be responsible for all planning and construction, operation, and maintenance functions related to the transmission system assets. BCTC will also be responsible for establishing and obtaining approval from the Commission of a transmission tariff rate for use of these assets. The transmission tariff will recover the full cost of providing service including an asset owner component that is collected on behalf of, and remitted to, BC Hydro.

The consolidated financial statements of BC Hydro include the accounts of BCTC for the years ended March 31, 2005 and 2004. BC Hydro will remove BCTC from its consolidated accounts effective April 1, 2005 when BCTC is considered operationally and financially independent of BC Hydro.

### **Powerex Legal Proceedings**

At March 31, 2005, Powerex was owed US\$268 million (CDN\$324 million) by the California Power Exchange (Cal Px) and the California Independent System Operator (Cal ISO) related to Powerex's electricity trade activities in California during fiscal 2001. As a result of payment defaults by a number of California utilities in 2001, the Cal Px and Cal ISO were unable to pay these amounts to Powerex. In addition, certain California parties requested the Federal Energy Regulatory Commission (FERC) consider whether refunds should be made to the Cal Px, the Cal ISO and the California Department of Water Resources by various suppliers, including Powerex. The FERC is calculating the extent to which sellers' receivables may be offset by refunds to the Cal Px and Cal ISO markets, while FERC's refund orders themselves are before US appellate courts.

Since 2000, Powerex has been named, in some cases along with other energy providers, as a defendant in a number of lawsuits and US federal regulatory proceedings which seek damages and/or contract rescission based on allegations that, during part of 2000 and 2001, the California wholesale electricity markets were unlawfully manipulated and that the energy prices were not just and reasonable.

Due to the ongoing nature and uncertain status of the regulatory and legal proceedings related to the California power markets, management cannot predict at this time the outcome of the claims against Powerex and BC Hydro. BC Hydro has recorded provisions for uncollectible amounts and legal costs associated with the ongoing legal and regulatory impacts of the California energy crisis during fiscal 2001. These provisions are based on management's best estimates, and are intended to adequately provide for any exposure. However, the amounts that may ultimately be collected may differ materially from management's current estimates. Management has not disclosed the provision amounts or ranges of expected outcomes due to the potentially adverse effect on the collection process.

### **Liquidity and Capital Resources**

Cash flow provided by operating activities for the year ended March 31, 2005 was \$675 million, compared with \$612 million for the prior year. The primary reasons for the increase in cash flow provided by operating activities is the increase in net income partially offset by the regulatory account transfers and the increase in net non-cash working capital.

BC Hydro is subject to an overall borrowing limit of \$8,800 million. At March 31, 2005 BC Hydro had an unused borrowing capacity totalling \$2,166 million. During the year ended March 31, 2005, BC Hydro issued \$540 million of new bonds. The funds from these issues and cash flows from operations has been used to redeem \$598 million of bonds, pay down revolving borrowings, fund the payment to the province and capital expenditures. Long-term debt, net of sinking funds and cash and cash equivalents, was \$6,627 million at March 31, 2005, compared to \$6,853 million as at the end of the prior year.

#### Capital Expenditures

Capital expenditures, including demand-side management programs, were as follows:

(in millions)	2005	2004	Increase (Decrease)
Generation replacements and expansion	\$ 120	\$ 124	\$ (4)
Transmission lines and substation replacements and expansion	132	177	(45)
Distribution improvements and expansion	233	201	32
General – computers, vehicles, etc.	56	72	(16)
Change in working capital related to capital asset expenditures <sup>1</sup>	3	32	(29)
Capital asset expenditures per Consolidated Statement of Cash Flows	\$ 544	\$ 606	\$ (62)
Power Smart (Demand-side management)	71	63	8
Total capital expenditures per Consolidated Statement of Cash Flows	\$ 615	\$ 669	\$ (54)

<sup>&</sup>lt;sup>1</sup> Adjustment from accrual to cash expenditures on the Consolidated Statement of Cash Flows.

For the year ended March 31, 2005, the decrease in transmission lines, substation improvements and expansion is due to the costs of two significant projects which were underway in 2004. The increase in distribution improvements and expansion is due to a higher volume of customer connections. The decrease in general expenditures is primarily due to the completion of a major integrated information system in the previous year. The increase in Power Smart expenditures is due to timing of incentive payments based on customer driven project schedules.

### **Mark-to-Market Gains and Losses**

BC Hydro uses mark-to-market accounting on its contracted commitments for foreign exchange transactions and Powerex trading transactions that do not qualify for hedge accounting. Mark-to-market gains are recorded as assets and losses are recorded as liabilities on the balance sheet. As at March 31, 2005, BC Hydro recorded a net gain of \$2 million (\$185 million gain less \$183 million loss) from mark-to-market transactions.

### **Earnings Sensitivity**

The following table shows the effect on earnings of changes in some key variables. The analysis is based on business conditions and production volumes in fiscal 2005. Each separate item in the sensitivity assumes the others are held constant. While these sensitivities are applicable to the period and magnitude of changes on which they are based, they may not be applicable in other periods, under other economic circumstances or greater magnitude of changes.

Factor		Change	Approximate change in earnings before regulatory deferral account transfers (in millions)	5 year high	5 year low
Hydro generation <sup>1</sup>		1,000 GWh	\$ 60	47,665 GWh	40,485 GWh
Electricity trade ma	argins	\$1/MWh	30	n/a	n/a
Interest rates		+/- 1 %	24	5.66 % <sup>2</sup>	2.39 % <sup>2</sup>
Exchange rates (CI	DN/US)	\$ 0.01	2	\$ 0.78 <sup>3</sup>	\$ 0.64 <sup>3</sup>
Weather		1 °C change in the average temperature	1	1.3 °C <sup>4</sup>	-0.4 °C⁴
Pension costs	_	e in the expected return 7 % on pension assets <sup>5</sup>	3	13.20 %	-4.10 %

<sup>&</sup>lt;sup>1</sup> Assumes change in hydro generation is offset by corresponding change in energy imports (i.e., increase in hydro generation is offset by decrease in energy imports).

#### **Risk Management**

BC Hydro faces risks specific to its business that could significantly impact its ability to achieve its short- and long-term goals. While risks cannot be eliminated, BC Hydro's strategies aim to minimize or mitigate them with a specific risk management process that is applied to day-to-day business activities as well as to specific projects and initiatives. BC Hydro's Chief Risk Officer is responsible for overseeing risk management activities of the company, and ensuring strong oversight by the Risk Management Committee. BC Hydro's Board of Directors also plays a key role in the risk management process as they must understand the risks being taken by BC Hydro and ensure they are appropriately managed.

The key risks BC Hydro faces include:

### Employee and Public Safety

Safety risks to the public can occur due to the multiple uses of water for electricity generation, recreation and waterways. Risks can also result from potential contact with transmission and distribution equipment located in communities. To minimize the risk, BC Hydro relies on design, construction and operating standards and practices, consultation with other agencies and stakeholder groups, and public education.

<sup>&</sup>lt;sup>2</sup> Interest rates are the average Canadian short-term interest rates (3 month Canadian Dollar Offered Rate).

<sup>&</sup>lt;sup>3</sup> Exchange rates are the average Canadian Dollar noon rates for F2001 to F2005.

<sup>&</sup>lt;sup>4</sup> Weather high and low numbers represent the variance in degrees Celsius from the normal temperatures over the winter months November to March from 2000/01 to 2004/05. (–0.4 degrees lower than normal to 1.3 degrees higher than normal – normal is the 10-year rolling average).

<sup>&</sup>lt;sup>5</sup> The impact of this change affects earnings in the subsequent year.



The potential impacts to BC Hydro's generation facilities as a result of catastrophic weather events and earthquakes are managed to minimize risk to public safety. BC Hydro also prepares and keeps current comprehensive emergency response plans to limit injury and loss of life and to restore electric service.

Many of BC Hydro's employees face significant risk of serious injury or death by the nature of their jobs. BC Hydro's work safety plans include injury prevention, providing a safe workplace and training, and by making all employees responsible for health and safety.

### Reliability

The most significant risk to the reliability of BC Hydro's distribution system is equipment failure. This can be due to weather impacts, vegetation growth, wildlife, and the aging of BC Hydro's assets. BC Hydro mitigates the likelihood and consequence of such impacts through effective design, construction, operations, maintenance and response. BC Hydro manages these risks by balancing customers' expectations of reliable service and cost considerations.

Reliability issues can result from a lack of available generation supply and associated transmission capacity to meet customer demand. BC Hydro manages these risks through long-term planning and by relying on a diverse supply of energy options.

### **Energy Cost**

Energy cost risk, or commodity risk as it is often referred to, is the most significant financial risk to BC Hydro. It can result from changing market prices for electricity and natural gas. It can also result when BC Hydro is required to purchase electricity from the markets due to increased electricity demand in B.C. or lower-than-expected water levels. Over the past five years, BC Hydro has experienced below average water inflows and has relied more heavily on volatile energy trading markets. BC Hydro manages energy cost risk through its flexible hydroelectric system, which allows water to be stored in large reservoirs and used when it is most economic. BC Hydro also hedges the cost of imported power and natural gas.

### Interest Rates and Foreign Exchange Rates

Changes in interest and foreign exchange rates can significantly impact BC Hydro's finance charges. BC Hydro uses several debt-management strategies to minimize the impact, including a number of variable interest rate and foreign exchange currency agreements. Interest and foreign exchange rate changes can also influence the performance and cost of BC Hydro's employee benefit and pension plans.

At March 31, 2005, \$1,936 million or 28.9 per cent of net debt was subject to interest rate reset within the next fiscal year. Interest rate risk is managed through Board approved policies, which require the debt portfolio to be managed using an appropriate blend of fixed and floating rate debt, as well as by managing the term to maturity of its debt portfolio to manage exposure to interest rate movements in the future. BC Hydro utilizes financial instruments, including interest rate swaps and options, to adjust the balance of fixed and floating rate debt, and to reduce its overall cost of borrowing.

Foreign exchange rate risk relates to potential changes in foreign currency rates, and the impact that this may have on BC Hydro's assets and obligations. BC Hydro is exposed to exchange rate risk through the cost of U.S. dollar electricity purchases, U.S. trading activity and U.S. dollar capital equipment purchases. To minimize the impact, BC Hydro manages its net foreign exchange position within strict limits. Foreign exchange rate risk is managed through policies and limits that are approved by the Board of Directors.

Some of BC Hydro's exposure to foreign exchange movements is reduced through its normal business activities, as BC Hydro is required to settle many of its transactions through payment or receipt of amounts in foreign currency. For example, as a component of BC Hydro's debt portfolio is denominated in U.S. dollars, this allows matching of U.S. dollar interest payments with U.S. dollar receipts from electricity trade activities. BC Hydro manages its remaining foreign exchange rate risk using a variety of financial instruments including foreign currency swaps, options and futures contracts.



### **Energy Trading**

BC Hydro's energy trading subsidiary (Powerex) is exposed to the risk of variable market prices and to the risk of counterparties who might not meet their obligations. Powerex manages these risks by operating within a conservative risk profile. This profile is defined through limits that are regularly reviewed by both the Powerex and BC Hydro Boards of Directors. This means that Powerex focuses mainly on shorter-term trading positions, backs forward commitments with physical supply, and operates within conservative credit limits. When Powerex does take on longer-term positions, these are closely monitored in the context of the overall energy trading portfolio.

Powerex is exposed to the risk of litigation, such as the potential liabilities from the California power crisis. Powerex follows Standards of Conduct and the Electric Power Supply Association's Code of Ethics and Sound Trading Practices to manage risk associated with litigation.

#### **Environmental and Social Performance**

BC Hydro's Environmental Responsibility Policy states that BC Hydro will meet or exceed environmental regulations defined by legislation, regulation, government directives and guidelines, as well as its commitments and agreements. Even if there is no environmental or social regulation, BC Hydro can face risks. These risks are managed through voluntary activities, such as the Water Use Plans. Voluntary action is taken with a view to managing long-term risk and for cost controls.

Areas where BC Hydro is exposed to the risk of non-compliance with environmental regulations include the release of hazardous materials into the environment, endangerment of wildlife and their habitats, or damage to heritage sites where there is evidence of historic human occupation. These risks are managed through environmental management system and risk mitigation strategies.

The Kyoto Protocol became legally binding on February 16, 2005. Some BC Hydro thermal generating facilities will be covered by anticipated legislation under the Canadian Environmental Protection Act regulating greenhouse gas (GHG) emissions as part of the Canadian government's plan for meeting its Kyoto commitments. Thermal generation comprises less than 10 per cent of BC Hydro's generating capacity and typically supplies less than five per cent of electricity generated at BC Hydro facilities. BC Hydro's comprehensive approach to avoiding GHG risk, including aggressive energy efficiency and conservation programs to avoid new generation, a province-wide goal of acquiring 50 per cent of new generation supply from BC clean sources and incorporating mechanisms to contractually insulate customers and the shareholder from future GHG regulatory costs that could impact Independent Power Producers will enable BC Hydro to be minimally affected by GHG regulation.

First Nations past grievances, land claims, service reliability and regulatory processes pose risks to BC Hydro. BC Hydro manages these risks through a comprehensive Aboriginal Relations program. The long-term goal of further building business relationships with First Nations is intended to go beyond addressing the impact of BC Hydro facilities on First Nations and reducing the associated financial, legal and operating risks, to having a more proactive, mutually beneficial approach to working together.

BC Hydro's Board and Executive Management Team have recently approved a Corporate Social Responsibility Policy. As the organization builds upon existing practices in this area, emerging risks will become evident.

#### Regulatory Risk

BC Hydro is permitted an opportunity to earn an allowed return on equity. Tariff rates are set for a specific year(s) based upon BC Hydro's consolidated cost and equity forecast. In general the risk (difference between forecast and actual) associated with all uncontrollable costs is covered through regulatory deferral accounts. The major cost components susceptible to variation included in the regulatory deferral accounts are water inflow variation, energy price including thermal fuel costs variation, unplanned capital costs on heritage resources, trade income and foreign exchange. BC Hydro's risk includes those associated with capital assets, domestic load volumes, maintenance costs, operations and administration costs, and interest expense.



#### Outlook

BC Hydro's Service Plan is required to be filed in February of each year under the Budget Transparency and Accountability Act. BC Hydro's February 2005 Service Plan indicates that income before regulatory deferral account transfers for fiscal 2006 is expected to be \$395 million and net income is expected to be \$411 million.

BC Hydro's earnings can fluctuate significantly due to various non-controllable factors such as the level of water inflows, market prices for electricity and natural gas, weather temperatures, interest rates and foreign exchange rates. This forecast assumes a customer load increase of 0.57 per cent, water inflows of 98 per cent of normal, average energy prices of US\$47/MWh, a consistent level of operating costs, short term interest rates of 3.65 per cent and a US dollar exchange rate of US\$0.83.

Forecast updates as of May 11, 2005 indicate significant reductions in forecast water inflows to 94 per cent of average and increases in energy prices to US\$57/MWh for fiscal 2006. As a result, cost of energy for domestic loads is expected to increase by \$40 million. Increased trading activity will drive up both trade revenue and related purchases but contribute only slightly to income as a result of tighter margins. Reductions in forecast operating costs, depreciation and taxes are expected to increase income by approximately \$15 million. As a result, income before regulatory deferral account transfers is forecast to be \$373 million. Net income is forecast to be \$396 million which is \$15 million below the original Service Plan since only a portion of the energy cost variance related to domestic loads is transferred to the regulatory deferral accounts.

At the last revenue requirements hearing BC Hydro did not request an increase to rates for fiscal 2006 after consideration of forecasted customer loads and all cost drivers. BC Hydro applied to the Commission on March 1, 2005 for approval of a fiscal 2006 allowed rate of return of 13.51 per cent which would result in a \$3 million revenue decrease. BC Hydro proposed to maintain fiscal 2006 rates at the current levels and transfer the \$3 million in revenue to its existing regulatory deferral accounts. The Commission approved the proposal on May 20, 2005.

During fiscal 2006, BC Hydro intends to prepare a revenue requirements application for fiscal years 2007 and 2008.

Subsequent to year-end, BC Hydro and the International Brotherhood of Electrical workers (IBEW) Local 258 ratified a Memorandum of Agreement to extend the current collective agreement. The new agreement took effect immediately and will expire on March 31, 2006. Also, the Canadian Office & Professional Employees (COPE) Local 378 collective agreement expired on March 31, 2005. On June 7, 2005 BC Hydro and COPE Local 378 signed a Memorandum of Agreement to extend the current collective agreement by one year. This agreement is subject to ratification by both parties.

As previously discussed, Powerex has been named as a defendant in a number of lawsuits and U.S. federal regulatory proceedings which seek damages and/or contract rescission based on allegations that, during part of 2000 and 2001, the California wholesale electricity markets were unlawfully manipulated and that the energy prices were not just and reasonable. Powerex will continue to defend itself against these legal claims as they believe the terms of its sales were just and reasonable.

## Management Report

The consolidated financial statements of British Columbia Hydro and Power Authority (BC Hydro) are the responsibility of management and have been prepared in accordance with Canadian generally accepted accounting principles, consistently applied and appropriate in the circumstances. The preparation of financial statements necessarily involves the use of estimates which have been made using careful judgment. In management's opinion, the consolidated financial statements have been properly prepared within the framework of the accounting policies summarized in the consolidated financial statements and incorporate, within reasonable limits of materiality, all information available at May 9, 2005 (except for Note 18 which is as of June 17, 2005). The consolidated financial statements have also been reviewed by the Audit & Risk Management Committee and approved by the Board of Directors. Financial information presented elsewhere in this Annual Report is consistent with that in the consolidated financial statements.

Management maintains systems of internal controls designed to provide reasonable assurance that assets are safeguarded and that reliable financial information is available on a timely basis. These systems include formal written policies and procedures, careful selection and training of qualified personnel and appropriate delegation of authority and segregation of responsibilities within the organization. An internal audit function independently evaluates the effectiveness of these internal controls on an ongoing basis and reports its findings to management and the Audit & Risk Management Committee.

The financial statements have been examined by independent external auditors. The external auditors' responsibility is to express their opinion on whether the financial statements, in all material respects, fairly present BC Hydro's financial position, results of operations and cash flows in accordance with Canadian generally accepted accounting principles. The Auditors' Report, which follows, outlines the scope of their examination and their opinion.

The Board of Directors, through the Audit & Risk Management Committee, is responsible for ensuring that management fulfills its responsibility for financial reporting and internal controls. The Audit & Risk Management Committee, comprised of directors who are not employees, meets regularly with the external auditors, the internal auditors and management to satisfy itself that each group has properly discharged its responsibility to review the financial statements before recommending approval by the Board of Directors and appointment of external auditors. The internal and external auditors have full and open access to the Audit & Risk Management Committee, with and without the presence of management.

R.G. (Bob) Elton President and Chief Executive Officer

A. (Alister) Cowan Executive Vice-President Finance and Chief Financial Officer

Vancouver, Canada June 17, 2005



## Auditor's Report

The Lieutenant Governor in Council, Province of British Columbia:

We have audited the consolidated balance sheet of British Columbia Hydro and Power Authority as at March 31, 2005 and the consolidated statements of operations, retained earnings and cash flows for the year then ended. These financial statements are the responsibility of British Columbia Hydro and Power Authority's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of British Columbia Hydro and Power Authority as at March 31, 2005 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

Ernst \* young UP

Chartered Accountants

Vancouver, Canada

May 9, 2005 (except for Note 18 which is as of June 17, 2005)



## **Consolidated Statement of Operations**

	2005	2004
for the years ended March 31 (in millions)		(restated, Note 2)
Revenues		
Domestic	2,704	2,553
Trade	1,021	871
	3,725	3,424
Expenses		
Energy costs (Note 4)	1,959	1,580
Maintenance	246	263
Operations and administration	385	358
Amortization (Notes 5 and 18)	446	526
Taxes (Note 6)	143	147
	3,179	2,874
Operating Income	546	550
Finance charges (Note 7)	443	452
Payment from Alcan Inc. (Note 14)	(137)	_
Restructuring costs (Note 19)	_	8
Income Before Regulatory Account Transfers	240	90
Heritage Deferral Account (Note 3)	131	_
Non-Heritage Deferral Account (Note 3)	128	_
Trade Income Deferral Account (Note 3)	(110)	_
Regulatory provision for future removal and site restoration costs (Note 3)	13	_
Rate Stabilization Account (Note 3)	_	21
Net Income	\$ 402	\$ 111

## **Consolidated Statement of Retained Earnings**

for the years ended March 31 (in millions)	2005	2004
Retained earnings, beginning of year as previously reported	\$1,634	\$1,609
Adoption of new accounting standard for asset retirement obligations (Note 2)	242	229
Retained earnings, beginning of year as restated	\$1,876	\$1,838
Regulatory provision for future removal and site restoration costs (Note 3)	(251)	_
Net income	402	111
Payment to the Province (Note 3)	(339)	(73)
Retained Earnings, end of year	\$1,688	\$1,876

See accompanying notes to consolidated financial statements.



### **Consolidated Balance Sheet**

Consolidated balance sheet		
	2005	2004
as at March 31 (in millions)		(restated, Note 2)
ASSETS		
Capital Assets (Note 8)		
Capital assets in service	\$ 15,792	\$ 15,371
Less accumulated amortization	6,293	5,941
	9,499	9,430
Unfinished construction	483	470
	9,982	9,900
Current Assets		
Cash and cash equivalents	37	47
Accounts receivable and accrued revenue	398	325
Materials and supplies	91	86
Prepaid expenses	149	108
Mark-to-market gains	185	80
	860	646
Other Assets and Deferred Charges		
Sinking funds (Note 9)	948	981
Demand-side management programs	207	161
Regulatory accounts (Note 3)	155	_
Deferred debt costs (Note 10)	10	150
Foreign currency contracts (Notes 11 and 12)	1	
	1,321	1,292
	\$ 12,163	\$ 11,838

See accompanying notes to consolidated financial statements.



as at March 31 (in millions)	2005	2004 (restated, Note 2)
LIABILITIES AND EQUITY		
Long-term debt net of sinking funds	\$ 5,821	\$ 6,039
Sinking funds presented as assets	948	981
Long-Term Debt (Note 11)	6,769	7,020
Foreign Currency Contracts (Notes 11 and 12)	87	63
Current Liabilities		
Current portion of long-term debt (Note 11)	843	861
Accounts payable and accrued liabilities	753	672
Accrued interest	116	115
Accrued Payment to the Province (Note 3)	339	73
Mark-to-market losses	183	54
	2,234	1,775
Deferred Credits and Other Liabilities		
Asset retirement obligations (Notes 2 and 13)	15	16
Regulatory provision for future removal and site restoration costs (Note 3)	238	_
Deferred revenue	297	276
Contributions in aid of construction	651	619
Contributions arising from the Columbia River Treaty	184	193
	1,385	1,104
Retained Earnings	1,688	1,876
	\$ 12,163	\$11,838

Commitments and Contingencies (Notes 9, 11, 12, 16 and 18)

See accompanying notes to consolidated financial statements.

Approved on behalf of the Board:

L.I. (Larry) Bell

Chair

W.C. (Wanda) Costuros

Chair, Audit & Risk Management Committee



### **Consolidated Statement of Cash Flows**

	2005	2004
for the years ended March 31 (in millions)		(restated, Note 2)
Operating Activities		
Net income	\$ 402	\$ 111
Adjustments for non-cash items:		
Regulatory account transfers	(149)	(21)
Transfer to regulatory provision for future removal and site restoration	(13)	_
Amortization of capital assets	446	526
Amortization of deferred debt costs	16	26
Deferred revenue	22	18
Unrealized (gains) losses on mark-to-market	24	(39)
Sinking fund income	(47)	(58)
Employee benefit plan expenses	38	42
Provision for loan receivable	_	22
Other non-cash items	(4)	(15)
	735	612
Working capital changes	(60)	_
Cash provided by operating activities	675	612
Investing Activities		
Capital asset expenditures	(544)	(606)
Contributions in aid of construction	66	56
Demand-side management programs	(71)	(63)
Dismantling costs	(13)	(15)
Proceeds from property sales	5	10
Cash used for investing activities	(557)	(618)
Financing Activities		
Bonds		
– issued	540	790
– retired	(598)	(450)
Revolving borrowings	(42)	(47)
Sinking funds	39	53
Deferred debt costs	(5)	7
Settlement of derivative contracts	11	34
Cash (used for) provided by financing activities	(55)	387
Payment to the Province (Note 3)	(73)	(338)
Increase (decrease) in cash and cash equivalents	(10)	43
Cash and cash equivalents, beginning of year	47	4
Cash and cash equivalents, end of year	\$ 37	\$ 47
Supplemental disclosure of cash flow information		
Interest paid	\$ 505	\$ 512

See accompanying notes to consolidated financial statements.



For the Years Ended March 31, 2005 and 2004

### **Note 1: Significant Accounting Policies**

#### **Purpose**

British Columbia Hydro and Power Authority (BC Hydro) was established in 1962 as a Crown corporation of the Province of British Columbia (the Province) by enactment of the Hydro and Power Authority Act. As directed by the Hydro and Power Authority Act, BC Hydro's mandate is to generate, manufacture, distribute and sell power, upgrade its power sites, and to purchase power from or sell power to a firm or person. BC Hydro's new corporate purpose is to provide "Reliable power, at low cost, for generations." BC Hydro is subject to regulation (see Note 3) by the British Columbia Utilities Commission (the Commission) which, among other things, approves the rates BC Hydro charges for its services.

BC Hydro owns and operates electric generation and distribution facilities in the province of British Columbia. BC Hydro also owns transmission facilities in the province of British Columbia that are operated by British Columbia Transmission Corporation.

#### Consolidation

The consolidated financial statements include the accounts of BC Hydro and its principal wholly owned operating subsidiaries Powerex Corp. (Powerex), Powertech Labs Inc., BCH Services Asset Corp., and Columbia Hydro Constructors Ltd.

The consolidated financial statements also include the accounts of British Columbia Transmission Corporation (BCTC), a Crown corporation of the Province. The accounts of BCTC have been consolidated for the year ended March 31, 2005. BC Hydro will remove BCTC from its consolidated accounts effective April 1, 2005, when BCTC is considered operationally and financially independent of BC Hydro (see Note 19).

#### Regulatory Accounting

BC Hydro applies various accounting policies that differ from Canadian generally accepted accounting principles for enterprises that do not operate in a rate-regulated environment. Generally, these policies result in deferral and amortization of costs to allow for their recovery in future rates. These costs would otherwise be included in the determination of net income in the year the cost is incurred. These accounting policies support BC Hydro's regulation and have been established through ongoing application or by approval of the Commission.

### (a) Capital Assets

BC Hydro defers costs related to feasibility studies, the costs of dam safety studies and investigations, as well as the costs of aboriginal negotiations, litigation and settlements. These amounts are classified as capital assets in the balance sheet. The deferred amounts are amortized on a straight-line basis over the expected period of recovery through rates, generally from five to 10 years.

#### (b) Deferred Debt Costs

Certain costs related to the refinancing of debt are deferred and amortized on a straight-line basis over the term to maturity of the related debt. Foreign currency translation adjustments related to long-term debt and sinking funds are deferred and amortized over the weighted average term to maturity of the debt or sinking fund portfolio.

#### (c) Sinking Funds

Realized and unrealized gains and losses related to sinking fund investments in unitized funds are recognized in earnings on a straight-line basis over the weighted average term to maturity of the related debt. The investments in unitized funds are recorded at cost, adjusted by amortization of any realized and unrealized gains and losses.



For the Years Ended March 31, 2005 and 2004

### (d) Demand-side Management Programs

Demand-side management programs are carried at cost net of amortization, and comprise programs designed to reduce the energy requirements on BC Hydro's system.

Costs of demand-side management programs including materials, direct labour and applicable portions of administration charges, equipment costs, program costs and incentives, are deferred and amortized on a straight-line basis over the anticipated period of benefit of the program, generally not in excess of ten years. Costs incurred prior to establishing feasibility of the program are expensed as incurred.

### (e) Regulatory Provision for Future Removal and Site Restoration Costs

As a result of a regulatory decision issued by the Commission in October 2004, BC Hydro established a one-time regulatory provision for future removal and site restoration costs effective April 1, 2004. The costs of dismantling and disposal of capital assets will be applied to this regulatory liability if they do not otherwise relate to an asset retirement obligation.

#### Revenues and Energy Costs

Domestic revenues comprise sales to customers within the province of British Columbia, and sales of firm energy outside the province under long-term contracts that are reflected in BC Hydro's domestic load requirements. Other sales outside the province are classified as trade. Trade revenues and energy costs include the effects of using commodity derivatives with the impacts of realized and unrealized gains and losses resulting from changes in fair value reflected on a net basis.

Revenue is recognized on the basis of billing cycles and also includes accruals for electricity deliveries not yet billed.

### Foreign Currency Translation

Foreign currency denominated revenues and expenses are translated into Canadian dollars at the rate of exchange in effect at the transaction date. Foreign currency denominated monetary assets and liabilities are translated into Canadian dollars at the rate of exchange prevailing at the balance sheet date.

Foreign currency translation adjustments related to long-term debt and sinking funds are deferred and amortized on a straight-line basis. Deferred foreign currency translation adjustments related to long-term debt are amortized over the weighted average remaining term to maturity of the foreign currency denominated debt portfolio. Deferred foreign currency translation adjustments related to sinking funds are amortized over the weighted average term to maturity of the sinking fund portfolio. Unamortized foreign currency translation adjustments related to debt issues that are refinanced in the same currency continue to be deferred and amortized. Where debt is refinanced in a different currency, a pro rata portion of the unamortized foreign currency translation gains or losses is written off to finance charges.



For the Years Ended March 31, 2005 and 2004

#### **Amortization**

Capital assets in service are amortized on an individual or a pooled basis over the expected useful lives of the assets, generally using the straight-line method.

The expected useful lives, in years, of BC Hydro's main classes of capital assets are:

#### Generation

Hydraulic	50 - 100
Thermal	10 - 50
Distribution	30 - 50
Transmission lines	35 - 100
Substations	20 - 50
Buildings	45 – 50
Equipment	7 - 20
Computer hardware & software	2 - 10
Service vehicles	7 - 20
Regulatory capital assets <sup>1</sup>	5 - 10
Sundry	20 - 45

<sup>&</sup>lt;sup>1</sup> Comprised of studies, investigation costs, and costs of aboriginal negotiations, litigation and settlements.

#### Capital Assets

Capital assets in service are recorded at cost which includes materials, direct and indirect labour, an appropriate allocation of administration overhead and finance charges capitalized during construction. Costs of construction in progress are transferred to capital assets in service when the asset is substantially complete and capable of operation at a significant level of capacity. Capital assets in service include the cost of plant financed by contributions in aid of construction and contributions arising from the Columbia River Treaty. Upon retirement or disposal, any gain or loss is charged to amortization for assets amortized on an individual basis, or to accumulated amortization for assets amortized on a pooled basis.

Unfinished construction consists of construction in progress and the unamortized balance of studies and abandoned or indefinitely deferred projects. Costs of studies and abandoned or indefinitely deferred projects are deferred and amortized on a straight-line basis over five years where it is expected that the costs will be recovered through future rates. If the costs of an abandoned or indefinitely deferred project will not be recovered through continuing operations or future rates, the costs related to the project, including overhead and interest during construction, are expensed.

### Cash and Cash Equivalents

Cash and cash equivalents include cash and units of a money market fund that are valued at the lower of cost or market.

### Materials and Supplies

Materials and supplies are valued at the lower of average cost and net realizable value.



For the Years Ended March 31, 2005 and 2004

#### Mark-to-Market

BC Hydro applies mark-to-market accounting to its energy trading activities and to certain liability management derivatives that are not accounted for as hedges.

For energy trading, open trade positions, that are derivative commodity instruments, are recorded at fair value and recorded as assets or liabilities in the balance sheet. The changes in fair value of open positions, primarily resulting from changes in market prices subsequent to the transaction date, are recognized as gains or losses in the period of change and are included in trade revenues.

BC Hydro uses derivatives such as interest rate or foreign currency swaps, options or forward agreements for liability management purposes, or to hedge its energy purchase commitments. Derivatives that are designated as hedges are accounted for on a basis consistent with the underlying financial exposure. If a derivative is not designated as a hedge, or if a derivative is no longer designated as a hedge or the hedging relationship is terminated, then the derivative is recorded at fair value from the date the hedging relationship ceases. The change in fair value is recorded as an adjustment of finance charges.

#### Fair Value

The fair value of financial instruments and energy trading positions reflect changes in the level of commodity market prices, interest and foreign exchange rates. Fair value is determined based on exchange or over-the-counter quotations. Where no such information is available, fair value is established through pricing models and reflects the amount that BC Hydro expects it would receive or pay to terminate the position at the date that the value is established.

Fair value amounts reflect management's best estimates considering various factors including closing exchange or over-the-counter quotations, estimates of future prices and foreign exchange rates, time value and volatility. It is possible that the assumptions used in establishing fair value amounts will differ from actual prices and the impact of such variations could be material

#### Derivative Financial Instruments

BC Hydro uses derivative financial instruments, principally swaps, options and forward agreements, to manage interest rate and foreign exchange risks related to debt and exposure to electricity and gas market prices.

Payments and receipts under interest rate and cross-currency swap contracts are recognized as adjustments to finance charges. Gains and losses on terminated derivative interest rate and cross-currency swaps, options and forward rate agreements that are accounted for as hedges are deferred and amortized on a straight-line basis over the original remaining term of the related contract.

#### Sinking Funds

Sinking funds are held as individual portfolios or units in a pooled bond fund. Securities included in an individual portfolio are recorded at cost, adjusted by amortization of any discounts or premiums arising on purchase on a yield basis over the estimated term to settlement of the security. Realized gains and losses are included in sinking fund income. Unrealized gains and losses are not recognized.

Units in pooled bond funds are carried at cost adjusted for amortization of realized and unrealized gains and losses. Realized and unrealized gains and losses related to securities held in the funds are recognized on a straight-line basis over the weighted average term to maturity of the debt issues for which the sinking funds are held.



For the Years Ended March 31, 2005 and 2004

#### Deferred Revenue

Deferred revenue consists principally of amounts received under the Skagit River Agreements. Under these agreements, BC Hydro is required to deliver a predetermined amount of electricity each year for an 80-year period ending in fiscal 2066. In return BC Hydro receives approximately US\$22 million each year for a 35-year period ending in fiscal 2021 and US\$100,000 (adjusted for inflation) each year for an 80-year period ending in fiscal 2066.

The amounts received under the Skagit River Agreements are deferred and included in income on an annuity basis over the electricity delivery period ending in fiscal 2066.

#### **Contributions**

Contributions in aid of construction are amounts paid by certain customers toward the cost of capital assets required for the extension of services. These amounts are amortized over the expected useful life of the related assets.

Contributions arising from the Columbia River Treaty relate to three dams built by BC Hydro in the mid-1960s to regulate the flow of the Columbia River. The proceeds received were contributed to BC Hydro to assist in financing the dams' construction. These proceeds were deferred and are amortized to income over the period ending in fiscal 2025, the minimum term of the treaty.

### Employee Defined Benefit Plans

The cost of pensions and other post-retirement benefits earned by employees is actuarially determined using the projected benefit method prorated on service and management's best estimate of expected plan investment performance, salary escalation, retirement ages of employees and expected health care costs. For the purpose of calculating the return on plan assets, those assets are valued at fair value. The obligations are discounted using a market interest rate at the end of the year on high-quality corporate debt instruments that match the timing and amount of expected benefit payments.

Transitional obligations and assets and past service costs from plan amendments are amortized on a straight-line basis over the average remaining service period of active members at the date of amendment.

The excess of the net cumulative unamortized actuarial gain or loss over 10 per cent of the greater of the benefit obligation and the fair value of plan assets at the beginning of the year is amortized over the average remaining service period of active employees. The average remaining service period of the active employees covered by the employee benefit plans is 11 years (2004 – 11 years). When the restructuring of a benefit plan gives rise to both a curtailment and a settlement of obligations, the curtailment is accounted for prior to the settlement.

#### **Environmental Expenditures and Liabilities**

BC Hydro conducts its operations in a manner that enables it to meet existing statutory requirements of environmental legislation or standards. The objective is to minimize the impact on the quality of the natural and social environment, providing enhancements wherever practical.

Environmental expenditures are expensed as part of operating activities, unless they constitute an asset improvement or act to mitigate or prevent possible future contamination, in which case the expenditures are capitalized and amortized to income. Environmental liabilities are accrued when environmental expenditures related to activities of BC Hydro are considered likely and the costs can be reasonably estimated. Estimated liabilities are reviewed periodically and these reviews can result in adjustments to previously recorded items.



For the Years Ended March 31, 2005 and 2004

#### Use of Estimates

Management of BC Hydro has made a number of estimates and assumptions relating to the reporting of assets and liabilities and to the disclosure of contingent assets and liabilities to prepare these consolidated financial statements in conformity with Canadian generally accepted accounting principles. Actual results could differ from these estimates.

### **Note 2: Changes in Accounting Policies**

The following accounting policy changes were implemented during fiscal 2005:

### **Asset Retirement Obligations**

Prior to March 31, 2004, BC Hydro recorded a provision for the estimated future costs associated with the retirement and decommissioning of its distribution, transmission and generation facilities in accordance with the previous requirements of CICA Handbook Section 3061. Effective April 1, 2004, BC Hydro adopted new CICA recommendations (Section 3110 "Asset Retirement Obligations") that address accounting and reporting for obligations associated with the retirement of long-lived assets.

This new section applies only to legal obligations associated with the retirement of long-lived assets. BC Hydro is required to record the net present value of a liability at the time it is incurred if an estimate can be determined. When a liability is initially recorded, BC Hydro will capitalize the costs by increasing the carrying value of the long-lived asset. The liability is adjusted for the passage of time through accretion (interest) expense and the capitalized cost is amortized over its useful life. The change in accounting policy has been applied retroactively including restatement of prior periods to eliminate the provision for future removal and site restoration costs that was previously reported.

As at March 31 the net impact of this change is as follows:

(in millions)	2005	2004	
Opening Balances:			
Increase in retained earnings	\$ 242	\$ 229	
Increase in capital assets, net	8	7	
Decrease in deferred credits and other liabilities	(234)	(222)	
Increase in net income	_	13	

### **Hedging Relationships**

During the year, BC Hydro implemented the requirements of CICA Accounting Guideline 13, "Hedging Relationships." This Guideline addresses the types of items that qualify for hedge accounting, including the formal documentation required to enable the use of hedge accounting and the requirement to evaluate hedges for effectiveness.

BC Hydro also implemented Emerging Issues Committee (EIC) Abstract 128, "Accounting for Trading, Speculative or Non-hedging Derivative Financial Instruments." The EIC requires derivatives that are not designated as hedges to be recorded at fair value on the balance sheet, with changes in fair value recorded in earnings.

The requirements of the Accounting Guideline and EIC were adopted prospectively for derivatives used for liability-management purposes effective April 1, 2004. The impact of this change in accounting policy is a \$3 million decrease in net income for the year ended March 31, 2005.



For the Years Ended March 31, 2005 and 2004

### **Note 3: Regulation**

BC Hydro is regulated by the Commission, and they are both subject to general or special directives and directions issued by order of the Province. Orders in council from the Province establish the basis for determining BC Hydro's equity for regulatory purposes, as well as its allowed return on equity, calculation of its revenue requirements, rates charged to customers and the annual Payment to the Province. BC Hydro's regulatory accounting practices are consistent with these regulatory requirements.

#### Rate Decision

On October 29, 2004, the Commission issued its decision related to BC Hydro's Revenue Requirements Application dated December 15, 2003 that covered BC Hydro's 2005 and 2006 fiscal years. As a result of this decision, BC Hydro was entitled to a rate increase of 4.85 per cent effective April 1, 2004. BC Hydro charged its customers during the period April 1, 2004 to November 30, 2004 based on an approved interim rate increase of 7.23 per cent. Therefore, BC Hydro refunded its customers \$38 million, including interest, based upon customers' electricity consumption during that period. The refund was charged to domestic revenue resulting in annual revenue consistent with the approved rate increase.

### Regulatory Accounts

During fiscal 2004, the Province issued a Special Directive that directs the Commission to authorize BC Hydro to establish the Heritage Deferral Account and the Trade Income Deferral Account effective April 1, 2004. As part of the Revenue Requirements Application related to fiscal 2005 and 2006, BC Hydro also applied to the Commission for the establishment of a Non-Heritage Deferral Account. The accounting requirements related to these accounts were approved by the Commission in its decision of October 2004. These accounts are intended to result in assigning domestic ratepayers the benefit of BC Hydro's low-cost generation assets (the Heritage Resources) and other related activities, as well as an appropriate share of risks associated with the ownership and operation of these assets.

### **Heritage Deferral Account**

The Heritage Deferral Account is intended to mitigate the impact of certain variances between the forecast and actual costs of service associated with the Heritage Resources. The impact of this account is to defer the impact of these cost variances through transfers to or from the account by adjustment of net income.

#### **Non-Heritage Asset Deferral Account**

The Non-Heritage Asset Deferral Account is intended to manage the impact of certain cost variances related to energy acquisition and maintenance of BC Hydro's distribution assets. The impact of this account would be to defer specific types of cost variance through transfers to or from the account by adjustment of net income.

### **Trade Income Deferral Account**

The Trade Income Deferral Account is intended to mitigate the uncertainty associated with forecasting the net income of BC Hydro's trade activities. The impact is to defer the difference between the Trade Income forecast in the revenue requirements application and actual Trade Income. For the purposes of this calculation, Trade Income is defined as the Net Income of Powerex based on Canadian generally accepted accounting principles. The Special Directive provides that in each fiscal year the portion of the variance between forecast and actual Trade Income in excess of \$200 million per year or a loss in Trade Income will not be included in the Trade Income Deferral Account.



For the Years Ended March 31, 2005 and 2004

As at March 31, 2005, the balances included in the regulatory accounts are as follows:

(in millions)	2005		
Heritage Deferral Account	\$	138	
Non-Heritage Asset Deferral Account		131	
Trade Income Deferral Account		(114)	
	\$	155	

The deferral accounts include interest of \$6 million, calculated on the month-end balance of the account at BC Hydro's average cost of borrowing.

### Regulatory Provision for Future Removal and Site Restoration Costs

As part of its decision of October 2004, the Commission ordered the establishment of a regulatory provision for future removal and site restoration costs. This account was established by a one-time transfer of \$251 million from retained earnings. The account will be applied to mitigate the impact of asset dismantling and disposal costs that are not otherwise related to an asset retirement obligation. At March 31, 2005, the balance of the regulatory provision for future removal and site restoration costs was \$238 million (2004 – nil).

#### Rate Stabilization Account

The Rate Stabilization Account was established by Special Directive to BC Hydro, and was intended to mitigate the impact of volatile earnings on ratepayers.

During fiscal 2004, the remaining balance of the Rate Stabilization Account totalling \$21 million was transferred to net income and the related Special Directive to BC Hydro was revoked.

### Payment to the Province

BC Hydro is required to make an annual Payment to the Province (the Payment) on or before June 30 of each year. The Payment is equal to 85 per cent of BC Hydro's distributable surplus for the most recently completed fiscal year assuming that the debt to equity ratio of BC Hydro, after deducting the Payment, is not greater than 80:20. If the Payment would result in a debt to equity ratio exceeding 80:20, then the Payment will be based on the greatest amount that can be paid without causing the debt to equity ratio to exceed 80:20.

For the purposes of calculating the Payment, the following parameters are applied:

- Distributable surplus is consolidated net income adjusted by deducting finance charges capitalized during the year, net of amortization charged on capitalized finance charges.
- Debt is the sum of all outstanding borrowings after deducting sinking funds and cash and cash equivalents at the end of the year.
- Equity is the sum of retained earnings, deferred revenue, contributions arising from the Columbia River Treaty and contributions in aid of construction, all at the end of the year.



For the Years Ended March 31, 2005 and 2004

### **Note 4: Energy Costs**

(in millions)	2005	2004
Water rentals	\$ 234	\$ 246
Electricity purchases	1,338	988
Fuel	238	220
Third-party transmission charges	142	119
Compensation and mitigation costs	7	7
	\$ 1,959	\$ 1,580

Water rental fees are remitted to the Province by BC Hydro in accordance with the Water Act. Electricity purchases include \$248 million (2004 – \$223 million) of energy purchased from the Province related to its ownership of downstream benefits under the Columbia River Treaty. These energy transactions are in the normal course of operations and are based on market prices.

### **Note 5: Amortization**

	2005	2004
(in millions)		(restated, Note 2)
Amortization of capital assets in service	\$ 428	\$ 401
Amortization of contributions arising from the Columbia River Treaty		
and contributions in aid of construction	(43)	(45)
Amortization of regulatory capital assets	11	8
Amortization of demand-side management programs	26	25
Dismantling costs	13	15
Valuation provision (Note 18)	_	98
Capital asset write-offs	11	24
	\$ 446	\$ 526

### **Note 6: Taxes**

(in millions)	2005	2004
School taxes	\$ 100	\$ 100
Grants	43	42
Other	_	5
	\$ 143	\$ 147

All taxes paid by BC Hydro are paid to the Province, with the exception of \$40 million (2004 – \$39 million) of grants and local government taxes paid to municipalities and regional districts. As a Crown corporation, BC Hydro is exempt from Canadian federal and provincial income tax.



For the Years Ended March 31, 2005 and 2004

## **Note 7: Finance Charges**

(in millions)	2005	2004
Interest on long-term debt	\$ 500	\$ 516
Sinking fund income	(47)	(58)
Other financial income	(11)	(15)
Amortization of deferred debt costs	16	26
	\$ 458	\$ 469
Less: Assigned to unfinished construction	(9)	(17)
Interest on deferral accounts	(6)	_
	\$ 443	\$ 452

Virtually all interest on long-term debt is paid to the Province.

## **Note 8: Capital Assets**

		20	05			2	004	
(dollar amounts in million	ns)					(restated	d, Note 2)	
	Capital Assets in Service	Accumulated Amortization	Unfinished Construction	Composite Amortization Rate	Capital Assets in Service	Accumulated Amortization	Unfinished Construction	Composite Amortization Rate
Generation								
Hydraulic	\$ 5,359	\$ 1,723	\$ 142	1.6%	\$ 5,269	\$ 1,707	\$ 191	1.5%
Thermal	456	219	_	4.0	453	202	98	3.8
Valuation provision -	_							
(Note 18)		_					(98)	_
	5,815	1,942	142		5,722	1,909	191	_
Distribution	3,693	1,263	197	2.5	3,534	1,185	112	2.5
Transmission lines	2,711	1,256	53	1.9	2,792	1,257	47	2.1
Substations	2,218	1,107	24	3.3	1,980	952	54	3.1
Other								
Land and buildings	408	137	4	2.5	424	129	16	2.9
Equipment	282	210	1	6.9	290	191	8	6.8
Computer hardware								
& software	426	267	45	15.8	422	226	20	13.7
Service vehicles	113	67	3	8.8	111	62	3	8.9
Regulatory capital								
assets	98	30	11	11.6	63	18	11	11.1
Sundry	28	14	3	3.0	33	12	8	3.1
	1,355	725	67		1,343	638	66	_
Total	\$ 15,792	\$ 6,293	\$ 483		\$ 15,371	\$ 5,941	\$ 470	



For the Years Ended March 31, 2005 and 2004

### **Note 9: Sinking Funds**

Sinking funds are held by the Trustee (the Minister of Finance for the Province) for the redemption of long-term debt. The sinking fund balances at the balance sheet date include the following investments:

	2005	20	04
Carrying Value	Weighted Average Effective Rate <sup>1</sup>	Carrying Value	Weighted Average Effective Rate <sup>1</sup>
\$ 34	1.0 %	\$ 10	1.5 %
330	4.4		4.2
584 \$ 948	4.2	638 \$ 981	3.6
	Carrying Value \$ 34  330  584	Carrying Value         Effective Rate¹           \$ 34         1.0 %           330         4.4           584         4.2	Carrying Value         Weighted Average Effective Rate¹         Carrying Value           \$ 34         1.0 %         \$ 10           330         4.4         333           584         4.2         638

Rate calculated on market yield to maturity.

### **Sinking Fund Requirements**

Substantially all of BC Hydro's debt issues have annual sinking fund cash requirements. The annual sinking fund cash requirements for the next five years are:

(in millions)	2006	2007	2008	2009	2010	
Canadian	\$49	\$45	\$43	\$42	\$36	
US	(US\$6) \$7					
	\$56	\$52	\$50	\$49	\$43	

### **Note 10: Deferred Debt Costs**

(in millions)	2005	2004
Deferred foreign currency translation adjustments	\$ 1	\$ 123
Deferred debt issue and refinancing costs	9	27
	\$ 10	\$ 150

<sup>&</sup>lt;sup>2</sup> Money market unitized funds consist of federal and provincial government paper and high-grade commercial paper with a maturity of one year or less.



For the Years Ended March 31, 2005 and 2004

### Note 11: Long-Term Debt and Debt Management

BC Hydro's long-term debt comprises bonds and debentures, substantially all of which have annual sinking fund requirements (see Note 9), and revolving borrowings obtained under an agreement with the Province. BC Hydro's debt is either held or guaranteed by the Province.

Under the Hydro and Power Authority Act, BC Hydro is subject to a borrowing limit of \$8,800 million after deduction of sinking funds. As at March 31, 2005, BC Hydro's total debt under the borrowing limit was \$6,634 million (2004 – \$6,890 million). BC Hydro's consolidated total debt net of sinking funds of \$948 million and including BCTC was \$6,664 million (2004 – \$6,900 million). The authorized commercial paper borrowing program, which includes revolving borrowings, is limited to \$1,400 million under the Fiscal Agency Agreement. As at March 31, 2005, the outstanding amount under the borrowing limit was \$896 million (2004 - \$992).

During fiscal 2005, BC Hydro issued bonds totalling \$510 million (2004 – \$790 million) with a weighted average effective interest rate of 5.4 per cent (2004 – 4.9 per cent) and a weighted average term to maturity of 11.9 years (2004 – 10.9 years). BCTC issued bonds totalling \$30 million (2004 – nil) with an effective interest rate of 4.1 per cent and a term to maturity of 4.5 years.

Long-term debt, expressed in Canadian dollars, is summarized in the following table by year of maturity:

(dollar amounts in millions	ons) <b>2005</b>			2004				
				Weighted Average Interest	I .			Weighted Average Interest
Materials to the set	Canadian	Foreign	Total	Rate <sup>1</sup>	Canadian	Foreign	Total	Rate <sup>1</sup>
Maturing in fiscal:								
2005	\$ -	\$ -	\$ -	- %	\$ 388	\$ 189	577	7.9 %
2006	413	188	601	5.7	413	203	616	5.0
2007	314	217	531	4.5	314	236	550	3.7
2008	9	605	614	4.2	9	655	664	2.9
2009	124	_	124	8.6	94	_	94	10.1
2010	574	60	634	6.5		_	_	_
Total								
1 – 5 years	1,434	1,070	2,504	5.4	1,218	1,283	2,501	5.0
6 – 10 years	1,425	242	1,667	6.2	1,674	328	2,002	6.4
11 – 15 years	525	_	525	5.4	350	_	350	5.5
16 – 20 years	1,306	_	1,306	10.1	1,296	_	1,296	10.1
21 – 25 years	_	605	605	6.6	_	655	655	6.6
26 – 30 years	400	_	400	6.3	400	_	400	6.3
Over 30 years	_	363	363	7.4	_	393	393	7.4
Bonds and debentures	5,090	2,280	7,370	6.7	4,938	2,659	7,597	6.6
Revolving borrowings	220	22	242	2.7	265	19	284	2.2
	\$ 5,310	\$ 2,302	7,612		\$5,203	\$ 2,678	7,881	
Less: Current portion			843				861	
Long-term debt			\$ 6,769	=			\$ 7,020	=

<sup>&</sup>lt;sup>1</sup> The weighted average interest rate represents the effective rate of interest on fixed-rate bonds and the current interest rate in effect at March 31 for floating-rate bonds, all before considering the effect of derivative financial instruments used to manage interest rate risk.



For the Years Ended March 31, 2005 and 2004

Under an agreement with the Province, BC Hydro indemnifies the Province for any credit losses incurred by the Province related to interest rate and foreign currency contracts entered into by the Province on BC Hydro's behalf. As at March 31, 2005, the aggregate exposure under this indemnity totalled approximately \$32 million (2004 – \$47 million). BC Hydro has not experienced any losses due to this indemnity.

The following interest rate contracts were in place at March 31, 2005 and 2004, with a carrying value of \$2 million at March 31, 2005 (2004 – nil). Floating rates are based on the effective rates at the balance sheet date and vary over time.

(dollar amounts in millions)	2005	2004
Receive fixed, pay floating rate swaps		
Notional amount <sup>1</sup>	\$ 1,152	\$ 1,505
Weighted average receive rate	4.91 %	4.58 %
Weighted average pay rate	2.71 %	1.76 %
Weighted terms	6 years	6 years
Receive floating, pay fixed rate swaps		
Notional amount <sup>1</sup>	\$ 808	\$ 1,894
Weighted average receive rate	1.71 %	1.94 %
Weighted average pay rate	4.35 %	3.57 %
Weighted terms	3 years	2 years
Receive floating, pay floating rate swaps		
Notional amount <sup>1</sup>	\$ 181	\$ 197
Average receive rate	2.95 %	1.20 %
Average pay rate	3.05 %	1.10 %
Remaining term	2 years	3 years

<sup>&</sup>lt;sup>1</sup> Notional amount for a derivative instrument is defined as the contractual amount on which payments are calculated.

The net carrying value of foreign exchange forward contracts in place at March 31, 2005 was \$(4) million (2004– nil).

The following foreign currency contracts with a net carrying value of \$(86) million (2004 – \$(63) million) were in place at March 31, 2005 and 2004. Such contracts are used to hedge foreign dollar principal and interest payments.

(currency dollar amounts in millions)	2005	2004
Cross-Currency Swaps¹		
BC Hydro receives foreign currency:		
United States dollar – notional amount <sup>2</sup>	US \$445	US \$543
United States dollar – weighted average exchange rate	1.41	1.42
Remaining term	5 years	5 years

<sup>&</sup>lt;sup>1</sup> Under these arrangements, BC Hydro receives or pays the foreign currency in exchange for Canadian currency.

<sup>&</sup>lt;sup>2</sup> Notional amount for a derivative instrument is defined as the contractual amount on which payments are calculated.



For the Years Ended March 31, 2005 and 2004

Total long-term debt, sinking funds and foreign currency contracts are stated in the following table showing the Canadian dollar equivalent of the currency in which they are payable.

in millions)		2005					2004
		In Canadian Dollars					
	In Currency Units	At the closing exchange rates at the balance sheet date (C\$)	Foreign Currency Contracts	Sinking Funds	Net Principal Before Hedging	Outstanding After Hedging	Net Principal Outstanding After Hedging
Canadian	\$ 5,310	\$ 5,310	\$ -	\$ (445)	\$ 4,865	\$ 5,375	\$ 5,456
US	\$ 1,903	2,302	86	(503)	1,885	1,375	1,507
		\$ 7,612	\$ 86	\$ (948)	\$ 6,750	\$ 6,750	\$ 6,963

#### **Note 12: Financial Instruments**

#### Fair Value

At March 31, 2005 and 2004, BC Hydro's financial instruments included cash and cash equivalents, accounts receivable, sinking funds, loans receivable, accounts payable, long-term debt and interest rate, foreign exchange and commodity derivative financial instruments. Some of these derivative financial instruments are held with the Province, which enters into such agreements with third parties on BC Hydro's behalf.

BC Hydro's financial instruments not shown in the following table have fair values that approximate carrying amounts:

(in millions)	2005					2004			
	Carrying Value <sup>1</sup>		Fair Value <sup>2</sup>		Carrying Value <sup>1</sup>		Fá	Fair Value <sup>2</sup>	
Bonds and debentures	\$	(7,370)	\$	(8,804)	\$	(7,597)	\$	(9,007)	
Revolving borrowings <sup>3</sup>		(242)		(242)		(284)		(284)	
Long-term debt before current portion	\$	(7,612)	\$	(9,046)	\$	(7,881)	\$	(9,291)	
Sinking funds	\$	948	\$	1,006	\$	981	\$	1,013	
Derivative financial instruments									
Net foreign currency contracts	\$	(86)	\$	(88)	\$	(63)	\$	(44)	
Interest rate swaps		2		22		_		43	
Foreign exchange forward contracts		(4)		(4)		_		_	
Commodity derivatives		4		(12)		25		25	

<sup>&</sup>lt;sup>1</sup> Carrying value represents the amount which is recorded in BC Hydro's financial statements. Bracketed amounts represent liabilities.

### Credit Risk Management

BC Hydro is directly exposed to counterparty credit risk as a result of the sale of electricity and related services to its domestic customers and purchase of electricity from independent power producers. BC Hydro is also exposed to credit risk as a result of the trade activities of Powerex. Powerex's principal counterparties are power exchanges, power pools, and utilities and their affiliates in the western United States and western Canada. Powerex has concentrations of credit exposure to a variety of other parties transacting throughout these regions. With respect to Powerex's sales and purchases, credit risk is managed by authorizing transactions with only credit-worthy counterparties as determined by BC Hydro Board-approved policies, and by monitoring the credit risk and credit standing of counterparties on a regular basis.

<sup>&</sup>lt;sup>2</sup> Market rates and prices used in determining fair value are as of the balance sheet date.

<sup>&</sup>lt;sup>3</sup> As the interest rates on revolving borrowings are reset on a regular basis, fair value approximates carrying value.



For the Years Ended March 31, 2005 and 2004

### **Note 13: Asset Retirement Obligations**

(in millions)	2005	2004
Asset retirement obligations, beginning of year	\$ 16	\$ 14
Liabilities incurred in the period	_	1
Extension of anticipated retirement date	(2)	_
Accretion expense	1	1
Asset retirement obligations, end of year	\$ 15	\$ 16

BC Hydro estimates the undiscounted amount of cash flows required to settle the asset retirement obligation is approximately \$25 million, which will be incurred between 2008 and 2018. A discount rate of 5.9 per cent was used to calculate the carrying value of the asset retirement obligations.

### Note 14: Payment from Alcan Inc.

During fiscal 2002, Enron Corp. and certain of its subsidiaries, including Enron Power Marketing, Inc. (EPMI), filed for bankruptcy protection. As a result, Powerex's Power Purchase and Sale Agreement with EPMI terminated, giving rise to a termination payment becoming due from EPMI. Under a 1997 agreement among Alcan Inc. (Alcan) (formerly Alcan Aluminum Limited), EPMI, Powerex and BC Hydro, Alcan agreed to remain liable to Powerex for the payment obligations of EPMI up to US\$100 million.

After arbitration and numerous court appeals, on October 7, 2004, Alcan withdrew from all legal challenges to the arbitration award and signed, along with Powerex, an agreement concerning the final resolution of this matter.

On December 23, 2004, Alcan paid Powerex US\$110.4 million representing the arbitration award of US\$100 million plus interest.



For the Years Ended March 31, 2005 and 2004

### **Note 15: Employee Defined Benefit Plans**

BC Hydro provides a defined benefit statutory pension plan as well as supplemental arrangements, which provide pension benefits in excess of statutory limits, to virtually all employees. Pension benefits are based on years of membership service and highest five-year average pensionable earnings. Annual cost-of-living increases are provided to pensioners to the extent that funds are available in the indexing fund. Employees make basic and indexing contributions to the plan funds based on a percentage of current pensionable earnings. BC Hydro contributes amounts as prescribed by an independent actuary. BC Hydro is responsible for ensuring that the statutory pension plan has sufficient assets to pay the pension benefits upon retirement of employees. The supplemental arrangement is unfunded. The most recent actuarial funding valuation for the statutory pension plan was performed at December 31, 2001. The next valuation for funding purposes must be as of December 31, 2003.

BC Hydro also provides post-retirement benefits other than pensions including medical, extended health and life insurance coverage for retirees who have at least 10 years of service and qualify to receive pension benefits. Certain benefits, including the short-term continuation of health care and life insurance, are provided to terminated employees or to survivors on the death of an employee. These other post-retirement benefits and post-employment benefits are not funded. Post-employment benefits include the pay-out of benefits that vest or accumulate, such as banked vacation.

Information about the benefit plans, post-retirement benefits and post-employment benefits other than pensions is as follows:

(a) The net expense for BC Hydro's benefit plans is as follows:

	Pensio	n Benefit Plans	Other Benefit Plans		
(in millions)	2005	2004	2005	2004	
Benefit plans	\$ 40	\$ 52	\$ 35	\$ 28	

In fiscal 2004, the transfer of approximately 260 employees to the British Columbia Transmission Corporation (see Note 19) resulted in the curtailment of an insignificant portion of the BC Hydro defined benefit pension plan and other post-retirement benefit plans. The curtailment and related settlement of a portion of the plans was accounted for in fiscal 2005.

(b) Information about BC Hydro's benefit plans as at March 31, in aggregate, is as follows:

	Pension Benefit Plans		Other	Benefit Plans
(in millions)	2005	2004	2005	2004
Accrued benefit obligation	\$ 2,290	\$ 2,103	\$ 282	\$ 227
Fair value of plan assets	2,048	1,922	-	_
Plan surplus (deficit)	\$ (242)	\$ (181)	\$ (282)	\$ (227)
Unamortized net actuarial losses	376	337	133	97
Unamortized past service costs	9	10	-	_
Unamortized transition (asset) liability	(104)	(118)	46	53
Accrued benefit asset (liability)	\$ 39	\$ 48	\$ (103)	\$ (77)

The pension plan assets and obligations are measured as at December 31, 2004. The other benefit plan obligations are measured as at March 31, 2005. No valuation allowance was required in 2005 and 2004. None of the above plans were fully funded.



For the Years Ended March 31, 2005 and 2004

(c) The significant assumptions adopted in measuring BC Hydro's accrued benefit obligations are as follows:

	Pension Benefit Plans		Other Ben	efit Plans
	2005	2004	2005	2004
Discount rate				
– benefit cost	7 %	7 %	7 %	7 %
<ul> <li>accrued benefit obligation</li> </ul>	6 %	7 %	6 %	7 %
Expected long-term				
rate of return on plan assets	7 %	7 %	n/a	n/a
Rate of compensation increase				
<ul><li>benefit cost</li></ul>	5 %	5 %	n/a	n/a
<ul> <li>accrued benefit obligation</li> </ul>	3.5 %	5 %	n/a	n/a

Health care cost trend rate:

	2005	2004
Weighted average health care cost trend rate	7.2 %	6.9 %
Weighted average ultimate health care cost trend rate	4.1 %	4.1 %
Year in which ultimate health care cost trend rate will be achieved	2011	2010

(d) Other information about BC Hydro's benefit plans is as follows:

	Pensio	on Benefit Plans	Other	Benefit Plans
(in millions)	2005	2004	2005	2004
Employer contributions	\$ 31	\$ 31	\$ -	\$ -
Employee contributions	\$ 15	\$ 16	\$ -	\$ -
Benefits paid	\$ 104	\$ 95	\$ 9	\$ 9
Settlement payments	\$ 13	\$ 52	\$ -	\$ 24

(e) Asset allocation of the defined benefit statutory pension plan as at the measurement date:

	Target Allocation	2005	2004
Equities	60 %	60 %	62 %
Fixed income investments	30 %	30 %	29 %
Real estate	10 %	10 %	9 %

Plan assets are re-balanced within ranges around target applications. The expected return on plan assets is determined by considering long-term historical returns, future estimates of long-term investment returns and asset allocations.



For the Years Ended March 31, 2005 and 2004

### **Note 16: Commitments and Contingencies**

#### **Energy Commitments**

BC Hydro has long-term energy purchase contracts to meet a portion of its expected future domestic electricity requirements. The minimum obligations to purchase energy under these contracts have a total value of approximately \$13,422 million of which approximately \$5,850 million relates to the purchase of natural gas and natural gas transportation contracts, at market prices over 30 years. The remaining commitments are at predetermined prices. Powerex also has energy purchase commitments with a minimum payment obligation of \$4,905 million and purchase commitments for energy and capacity services with a value of \$719 million

The total payments for the next five years are approximately (in millions): 2006 - \$1,385; 2007 - \$1,011; 2008 - \$1,064; 2009 - \$1,043; 2010 - \$1,020.

Powerex has energy sales commitments over the next four years with a total value of \$702 million.

### Lease and Service Agreements

BC Hydro has entered into various agreements to lease facilities or assets, or to purchase business support services. The agreements cover periods of up to 10 years, and the aggregate minimum payments are approximately \$1,023 million. Payments for the next five years are approximately (in millions): 2006 – \$137; 2007 – \$131; 2008 – \$129; 2009 – \$128; 2010 – \$128.

### Demand-side Management Programs

BC Hydro has entered into Power Smart incentive and energy study agreements with customers. BC Hydro has committed to payments under these agreements totalling approximately \$71 million over the next two years as follows (in millions): 2006 – \$65; 2007 – \$6.



For the Years Ended March 31, 2005 and 2004

#### **Legal Contingencies**

#### (a) California Power Markets:

At March 31, 2005, Powerex was owed US\$268 million (CDN\$324 million) by the markets operated by the California Power Exchange (Cal Px) and the California Independent System Operator (Cal ISO) related to Powerex's electricity trade activities in California during fiscal 2001. As a result of payment defaults by a number of California utilities in 2001, the Cal Px and Cal ISO were unable to pay these amounts to Powerex. In addition, certain California parties requested the Federal Energy Regulatory Commission (FERC) consider whether refunds should be made to the Cal Px, the Cal ISO and the California Department of Water Resources by various suppliers, including Powerex. The FERC is calculating the extent to which sellers' receivables may be offset by refunds to the Cal Px and Cal ISO markets, while FERC's refund orders themselves are before US appellate courts.

Since 2000, Powerex has been named, in some cases along with other energy providers, as a defendant in a number of lawsuits and U.S. federal regulatory proceedings which seek damages and/or contract rescission based on allegations that, during part of 2000 and 2001, the California wholesale electricity markets were unlawfully manipulated and that the energy prices were not just and reasonable. In addition, certain California parties have requested the U.S. Department of Energy (DOE) to put conditions on Powerex's authorization to export electricity from the United States. Collectively, these proceedings are in various stages of defense; a number of issues and findings are presently on appeal and none has been the subject of final judicial action, and certain issues have been ordered to be remanded to the FERC for further proceedings, but such remands have not yet occurred. On March 26, 2004, the FERC approved a settlement agreement between the FERC Trial Staff and Powerex that acknowledged that there was no evidence that Powerex engaged in any gaming practices or concerted partnership practices with any other market participants, and further noted that Powerex was a valuable and reliable supplier of energy and ancillary services to the California market throughout the energy crisis. However, at the request of certain parties, this settlement is still subject to rehearing at FERC and subsequent appeals to the courts.

BC Hydro was also directly joined as a defendant in the California Consumer Class Action lawsuit. In response to an application by BC Hydro to be dismissed from the lawsuit, a U.S. Federal Court judge ruled that BC Hydro is immune from these claims in the United States by virtue of the Foreign Sovereign Immunities Act. The US Court of Appeals for the Ninth Circuit upheld this finding. The court also upheld the finding that Powerex does not enjoy foreign sovereign entity status and therefore remains a party to the lawsuit, which was ordered to be remanded back to California State Court. Powerex is seeking appeal of the latter decision.

Due to the ongoing nature and uncertain status of the regulatory and legal proceedings related to the California power markets, management cannot predict at this time the outcome of the claims against Powerex and BC Hydro. BC Hydro has recorded provisions for uncollectible amounts and legal costs associated with the ongoing legal and regulatory impacts of the California energy crisis during fiscal 2001. These provisions are based on management's best estimates, and are intended to adequately provide for any exposure. However, the amounts that may ultimately be collected may differ materially from management's current estimates. Management has not disclosed the provision amounts or ranges of expected outcomes due to the potentially adverse effect on the collection process.

**(b)** Due to the size, complexity and nature of BC Hydro's operations, various other legal matters are pending. It is not possible at this time to predict with any certainty the outcome of such litigation. Management believes that any settlements related to these matters will not have a material effect on BC Hydro's consolidated financial position or results of operations.



For the Years Ended March 31, 2005 and 2004

#### **Note 17: Segmented Information**

BC Hydro is organized as four operating segments, two service organizations and corporate management and support activities. The following operating segments operate as profit centres, and are subject to requirements established by the Province and to regulation by the Commission:

**Generation:** The Generation line of business (Generation LoB) is responsible for ownership functions, including operation and maintenance, associated with BC Hydro's generation assets, as well as for efficient commercial dispatch of the generation assets to support BC Hydro's domestic and electricity trade activity. Generation LoB's activities are subject to the Provincial Energy Policy and the Heritage Contract.

**Transmission:** The Transmission line of business (Transmission LoB) is responsible for ownership of BC Hydro's transmission, and subject to service agreements with British Columbia Transmission Corporation (BCTC). BCTC is a Crown corporation of the Province, and will be included in BC Hydro's consolidated accounts in the Transmission segment until the separation of BCTC from BC Hydro is complete (see Note 19).

**Distribution:** The Distribution line of business (Distribution LoB) is responsible for BC Hydro's customer management activities for customers in the province of British Columbia. These activities include forecasting and managing energy requirements, ownership and management of BC Hydro's distribution assets and customer care activities. Distribution LoB manages certain of BC Hydro's customer care activities subject to outsourcing agreements with Accenture Business Services of British Columbia Limited Partnership.

**Trade:** BC Hydro's trade activities are managed through its wholly owned subsidiary, Powerex. Powerex's trade activities generally occur within Alberta, Canada and the western United States. Powerex also works with Generation LoB to determine how BC Hydro's generation assets should be dispatched to support electricity trade.

Service organizations include Engineering Services and Field Services. Engineering Services' activities include project and construction management services to Generation LoB, Distribution LoB and selected external clients. Field Services provides restoration, maintenance, and construction services to Generation LoB, Transmission LoB and Distribution LoB as well as to external clients. Field Services' activities also include materials management and fleet management. Service organizations are responsible for providing services to BC Hydro's operating segments and to Corporate on a cost recovery basis subject to internal service agreements. The service organizations also provide services to external parties under arm's length business arrangements.

Corporate includes certain centralized business sustaining activities including Corporate executive office, Treasury, Legal, Internal Audit, Controller, Chief Information Officer, Strategic Planning, Human Resources, Stakeholder Engagement and Sustainability. It also includes ownership of corporate assets such as office buildings, furniture and equipment, and certain information technology assets.

BC Hydro uses various transfer pricing mechanisms that support revenue and cost accountability for management and regulatory purposes. The key transfer pricing mechanisms include:

**Energy:** Generation LoB transfers energy to Distribution LoB on a cost-of-service basis. Generation LoB also purchases energy from, and sells energy to, Powerex at market related prices.

**Transmission Services:** Transmission services are charged to Generation LoB and Distribution LoB, and to Powerex based on the tariffs that would apply to third-party users. These tariffs are approved by the Commission.

**Service Organization Charges and Corporate Costs:** Service organizations charge the operating segments and corporate for services provided using cost-based charges that are calculated based on the level and quantity of service consumed by the receiving organization. Corporate costs are allocated to the operating segments and service organizations.

Except for any adjustments required to present the segmented information in conformity with the transfer pricing mechanisms noted above, the accounting principles used are consistent with those used in preparing the consolidated financial statements.



For the Years Ended March 31, 2005 and 2004

## **Segmented Financial Information:**

Year ended March 31, 2005 (in millions)

	Generation \$	Transmission \$	Distribution \$	Trade \$	Services and Corporate \$	Consolidation Adjustments/ Eliminations \$	Total \$
External revenues	18	16	2,639	1,021	53	(22)	3,725
Inter-segment revenues	1,405	619	264	617	456	(3,361)	_
Amortization	116	150	89	4	87	_	446
Finance charges	184	118	80	9	52	_	443
Restructuring costs	_	_	_	_	_	_	_
Net income (loss)	182	105	162	256	(46)	(257)	402
Total assets	4,532	2,914	3,896	939	755	(873)	12,163
Capital expenditures							
& Demand-side							
management programs	123	145	311	4	32	_	615

Year ended March 31, 2004 (in millions) (restated, Note 2)

	Generation \$	Transmission \$	Distribution \$	Trade \$	Services and Corporate \$	Consolidation Adjustments/ Eliminations \$	Total \$
External revenues	23	13	2,481	873	50	(16)	3,424
Inter-segment revenues	1,502	656	_	475	352	(2,985)	_
Amortization	220	145	90	3	68	_	526
Finance charges	182	114	129	18	9	_	452
Restructuring costs	_	8	_	_	_	_	8
Net income (loss)	300	139	(327)	158	20	(179)	111
Total assets	4,662	3,108	3,429	533	575	(469)	11,838
Capital expenditures							
& Demand-side							
management programs	132	186	292	3	56	_	669

## **Geographic Information:**

Revenues, based on point of delivery, are as follows:

(in millions)	2005	2004
British Columbia	\$ 2,704	\$ 2,553
Rest of Canada	204	200
United States	817	671
	\$ 3,725	\$ 3,424

Virtually all of BC Hydro's assets are located in the province of British Columbia.



For the Years Ended March 31, 2005 and 2004

#### Note 18: Vancouver Island Generation and Georgia Strait Crossing Projects

In fiscal 2005, BC Hydro completed an evaluation process for providing additional supply to its customers located on Vancouver Island. The evaluation process included the assessment of competing tenders submitted under the Vancouver Island Call for Tenders for Capacity and Associated Energy (Call for Tenders). This included assessment of various tenders that would require the purchase and use of the Vancouver Island Generation Project (VIGP) project assets that are owned by BC Hydro.

In November 2004, BC Hydro awarded and executed an Electricity Purchase Agreement (EPA) and associated VIGP Transfer Agreement (VTA) to Duke Point Power Limited Partnership (DPP) pursuant to the Call for Tenders. The EPA was filed with the British Columbia Utilities Commission (the Commission) for approval as an "energy supply contract" under section 71 of the Utilities Commission Act. The VTA required that BC Hydro sell, and DPP purchase, the VIGP assets for \$50 million. These assets would then be used in the development of a gas-fired plant at Duke Point, near Nanaimo, British Columbia from which BC Hydro would purchase electrical capacity and associated energy over a 25-year term. The Commission convened a public interest review hearing relative to the EPA and issued an order on February 17, 2005 accepting the EPA for filing subject to certain conditions including a requirement that BC Hydro and Terasen Gas (Vancouver Island) Inc. enter into a long-term gas transportation agreement to service the project at Duke Point as well as the Island Cogeneration Project, also located on Vancouver Island. Two intervenors subsequently filed applications in the British Columbia Court of Appeal for leave to appeal the Commission's order to that court. Those applications were dismissed in April 2005. Further applications were filed seeking reconsideration of that dismissal and the Court of Appeal granted leave to appeal on June 14, 2005.

BC Hydro announced on June 17, 2005 that it will exercise its contractual right to terminate the EPA and VTA, without liability to DPP, apart from the obligation to return performance security and a deposit. As at the date of termination, the total amount spent by BC Hydro on VIGP totalled approximately \$70 million and the carrying value of these assets after provisions is nil.

During the planning for VIGP, BC Hydro also anticipated the need for gas supply utilizing the Georgia Strait Crossing Pipeline (GSX) which would transport natural gas from Huntingdon/Sumas on the Washington state/British Columbia border to Vancouver Island via Washington state. The GSX project was owned jointly by BC Hydro and Williams Gas Pipeline Company, LLC (Williams). During fiscal 2004, as a result of the regulatory uncertainty whether the VIGP and GSX projects would proceed, BC Hydro and Williams agreed to curtail spending on GSX. In December 2004 BC Hydro and Williams cancelled GSX and this project is currently subject to windup of its activities. As at March 31, 2005, BC Hydro had spent approximately \$50 million by way of loans to the GSX project entities owned by Williams and project expenditures by BC Hydro. Under the project agreements, Williams is excused of any obligation to contribute funds toward repayment of these loans, which remain outstanding. The carrying value of these project assets after provisions is nil.

During fiscal 2004 BC Hydro recorded a \$120 million provision for the VIGP and GSX projects to reflect the uncertainty as to the projects proceeding or the costs being recovered. Of this amount, \$98 million was charged to amortization with the balance included in operations and administration. BC Hydro believes the provision is adequate with respect to any potential losses related to these projects including any related contingencies. During fiscal 2004 BC Hydro also obtained approval from the Commission for the establishment of a designated regulatory account with respect to the costs of VIGP and GSX. BC Hydro management has determined that it will not pursue regulatory relief with respect to any unrecovered costs related to the VIGP or GSX projects.



For the Years Ended March 31, 2005 and 2004

#### Note 19: Transaction with British Columbia Transmission Corporation

Under the provincial Energy Plan, the responsibility for the management of BC Hydro's transmission system assets was transferred to the British Columbia Transmission Corporation (BCTC), a Crown corporation of the Province. BCTC will manage the transmission assets in order to provide transparent open-access transmission services. BCTC's role in managing the transmission assets is governed by the Transmission Corporation Act, enacted on May 29, 2003. BC Hydro and BCTC's relationship is also subject to the terms of various Key Agreements and Service Agreements. BCTC received an equity contribution from the Province of \$20 million during fiscal 2004.

BC Hydro will retain legal ownership of substantially all of the transmission system assets. BC Hydro is also responsible for funding the purchase costs of additions to and replacements of the transmission assets that it owns. BCTC will be responsible for all planning and construction, operation, and maintenance functions related to the transmission system assets. BCTC will also be responsible for establishing and obtaining approval from the Commission of a transmission tariff rate for use of these assets. The transmission tariff will recover the full cost of providing service including an asset owner component that is collected on behalf of, and remitted to, BC Hydro.

During fiscal 2004, BC Hydro permanently transferred 260 employees to BCTC. These employees are responsible for planning, managing and operating the transmission system. The reorganization of BC Hydro to create BCTC resulted in restructuring costs of \$8 million in fiscal 2004.

The consolidated financial statements of BC Hydro include the accounts of BCTC for the years ended March 31, 2005 and 2004. BC Hydro will remove BCTC from its consolidated accounts effective April 1, 2005 when BCTC is considered operationally and financially independent of BC Hydro. The consolidated financial statements of BC Hydro include the following impacts related to consolidation of BCTC:

(in millions)	2005	2004
Increase in assets	\$ 84	\$ 58
Increase in liabilities	60	37
Increase in retained earnings	24	21
Increase in revenue	1	_
Decrease in expenses	(2)	(1)
Increase in net income	3	1

#### **Note 20: Comparative Information**

Certain amounts in the 2004 financial statements have been reclassified to conform to the presentation used in 2005.

## **Key Financial and Operating Comparatives**

#### **Financial Comparatives**

millions of dollars unless otherwise stated	2005	2004	2003	2002	2001
Revenues <sup>1</sup>	\$ 3,725	\$ 3,424	\$ 3,107	\$ 6,311	\$ 7,889
Net income	\$ 402	\$ 111	\$ 418	\$ 403	\$ 446
Capital assets	\$ 9,982	\$ 9,900	\$ 9,793	\$ 9,510	\$ 9,361
Net long-term debt <sup>2</sup>	\$ 6,627	\$ 6,853	\$ 6,849	\$ 6,889	\$ 6,214
Rate Stabilization Account	\$ -	\$ -	\$ 21	\$ 87	\$ 232
Retained earnings	\$ 1,688	\$ 1,876	\$ 1,609	\$ 1,529	\$ 1,459
Capital and deferred expenditures	\$ 612	\$ 637	\$ 741	\$ 545	\$ 413
Debt to equity	68:32	70:30	72:28	72:28	70:30
Return on equity (%)	14.24	3.74	15.47	15.24	16.59
Interest coverage	1.23	1.22	1.75	1.43	2.48
Operating Comparatives					
Number of customers	1 675 258	1 650 655	1 629 186	1 609 871	1 595 287
Generating capacity (MW):					
Hydroelectric	10 218	10 207	10 009	10 009	10 009
Thermal	1 093	1 093	1 099	1 093	1 093
Peak one-hour demand (MW)	9 437	9 619	8 481	8 692	8 995
Average annual KWh use per residential customer	10 722	10 761	10 476	10 695	10 344
Average number of customers per employee	378	372	266	265	275
Domestic sales (GWh)	51 205	50 151	48 677	47 801	48 131
Trade sales (GWh)	29 706	28 373	31 182	20 666	23 900
Total electricity sold per employee (GWh)	18.41	17.82	13.14	11.32	12.48

During fiscal 2004, in response to changes in United States accounting standards, BC Hydro amended its accounting policy related to revenue recognition for trade activities that are supported by derivatives such as swaps, forward sales and options. Revenues associated with these derivatives are presented on a net basis in fiscal years 2003 to 2005. Revenues for fiscal years prior to 2003 have not been restated.

<sup>&</sup>lt;sup>2</sup> Consists of long-term debt, including the current portion, net of sinking funds and cash and cash equivalents.



#### **Financial Statistics**

for the years ended or as at March 31 (millions of dollars)	2005	2004	2003	2002	2001
Revenues <sup>1</sup>	\$ 3,725	\$ 3,424	\$ 3,107	\$ 6,311	\$ 7,889
Expenses					
Energy costs <sup>1</sup>	1,959	1,580	1,126	4,407	5,162
Operating costs <sup>2</sup>	631	621	573	550	755
Amortization	446	526	417	386	380
Taxes	143	147	145	166	174
Finance charges	443	452	457	544	559
Payment from Alcan Inc.	(137)	_	_	_	_
Customer Profit Sharing	-	_	_	_	310
Restructuring costs	_	8	37	_	_
	3,485	3,334	2,755	6,053	7,340
Income Before Regulatory Account Transfers	240	90	352	258	549
Heritage Deferral Account	131	_	_	_	_
Non-Heritage Deferral Account	128	_	_	_	_
Trade Income Deferral Account	(110)	_	_	_	_
Regulatory provision for future removal					
and site restoration costs	13	_	_	_	_
Rate Stabilization Account	_	21	66	145	(103)
Net Income	\$ 402	\$ 111	\$ 418	\$ 403	\$ 446
Capital Assets					
At cost	\$16,275	\$ 15,841	\$ 15,609	\$ 15,067	\$ 14,617
Less: Accumulated depreciation	6,293	5,941	5,816	5,557	5,256
Net Book Value	\$ 9,982	\$ 9,900	\$ 9,793	\$ 9,510	\$ 9,361
Capital Asset Expenditures					
Sustaining	\$ 344	\$ 375	\$ 367	\$ 333	\$ 270
Expansion	197	199	329	198	142
Total capital asset expenditures <sup>3</sup>	\$ 541	\$ 574	\$ 696	\$ 531	\$ 412
Demand-side management (DSM) programs	71	63	45	14	1
Total capital asset and DSM					
program expenditures	\$ 612	\$ 637	\$ 741	\$ 545	\$ 413
Less: Contributions in aid of construction	66	56	62	54	44
Net Capital Asset Expenditures	\$ 546	\$ 581	\$ 679	\$ 491	\$ 369
Net Long-Term Debt⁴	\$ 6,627	\$ 6,853	\$ 6,849	\$ 6,889	\$ 6,214

During fiscal 2004, in response to changes in United States accounting standards, BC Hydro amended its accounting policy related to revenue recognition for trade activities that are supported by derivatives such as swaps, forward sales and options. Revenues and energy costs associated with these derivatives are presented on a net basis for fiscal years 2003 to 2005. Revenues and energy costs for fiscal years prior to 2003 have not been restated.

<sup>&</sup>lt;sup>2</sup> Maintenance, operations and administration costs.

<sup>&</sup>lt;sup>3</sup> Total capital asset expenditures include non-cash items.

<sup>&</sup>lt;sup>4</sup> Consists of long-term debt, including the current portion, net of sinking funds and cash and cash equivalents.



## **Operating Statistics**

•					
for the years ended or as at March 31	2005	2004	2003	2002	2001
Generating Capacity (megawatts)					
Hydroelectric <sup>1</sup>	10 218	10 207	10 009	10 009	10 009
Thermal	1 093	1 093	1 099	1 093	1 093
Total	11 311	11 300	11 108	11 102	11 102
Peak One-Hour Demand					
Integrated System (megawatts)	9 437	9 619	8 481	8 692	8 995
Customers					
Residential	1 484 339	1 462 079	1 442 597	1 424 505	1 411 333
Light industrial and commercial	187 313	185 065	183 188	182 025	180 607
Large industrial	138	136	133	132	131
Other	3 265	3 202	3 092	3 064	3 042
Trade	203	173	176	145	174
Total	1 675 258	1 650 655	1 629 186	1 609 871	1 595 287
Electricity Sold (gigawatt hours)					
Residential	15 814	15 646	15 024	15 170	14 537
Light industrial and commercial	17 459	17 175	16 757	16 446	16 292
Large industrial	16 177	15 505	15 179	14 513	15 573
Other	1 755	1 825	1 717	1 672	1 729
Domestic	51 205	50 151	48 677	47 801	48 131
Trade	29 706	28 373	31 182	20 666	23 900
Total	80 911	78 524	79 859	68 467	72 031
Domestic Change Over Previous Year (%)	2.1	3.0	1.8	(0.7)	3.6
Revenues (millions)					
Residential	\$ 1,016	\$ 960	\$ 923	\$ 930	\$ 892
Light industrial and commercial	967	912	893	874	866
Large industrial	573	525	516	482	524
Other energy sales	88	89	88	89	90
Domestic electric	2,644	2,486	2,420	2,375	2,372
Miscellaneous	60	67	55	75	59
Domestic	2,704	2,553	2,475	2,450	2,431
Trade <sup>2</sup>	1,021	871	632	3,861	5,458
Total	\$ 3,725	\$ 3,424	\$ 3,107	\$ 6,311	\$ 7,889

Maximum sustained generating capacity.

<sup>&</sup>lt;sup>2</sup> During fiscal 2004, in response to changes in United States accounting standards, BC Hydro amended its accounting policy related to revenue recognition for trade activities that are supported by derivatives such as swaps, forward sales and options. The revenues and costs associated with these derivatives are presented on a net basis for fiscal 2003 to 2005. Revenues for fiscal years prior to 2003 have not been restated.

## **Operating Statistics**

for the years ended or as at March 31	2005	2004	2003	2002	2001
Average Revenue (per kilowatt hour)					
Residential	6.4¢	6.1⊄	6.1⊄	6.1⊄	6.1⊄
Light industrial and commercial	5.5	5.3	5.3	5.3	5.3
Large industrial	3.5	3.4	3.4	3.3	3.4
Other	5.0	4.9	5.1	5.3	5.2
Trade <sup>1</sup>	7.1	6.8	6.2	18.7	22.8
Average Annual Kilowatt Hour					
use per Residential Customer	10 722	10 761	10 476	10 695	10 344
Lines in Service					
Distribution (kilometres) <sup>2</sup>	55 254	54 617	55 734	53 748	52 865
Transmission (circuit kilometres)	18 286	18 300	18 284	18 025	18 025
Number of Employees <sup>3</sup>	4 396	4 406	6 013	6 144	5 952

<sup>&</sup>lt;sup>1</sup> The method used to calculate the trade revenue per kilowatt hour is based on gross trade revenues for fiscal 2003 to 2005.

<sup>&</sup>lt;sup>2</sup> The method used to track the distance of the three-phase underground power lines was changed in fiscal 2004.

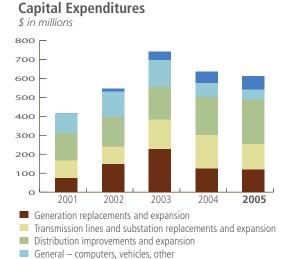
<sup>&</sup>lt;sup>3</sup> Includes full-time and part-time employees of BC Hydro, its subsidiaries and British Columbia Transmission Corporation. At April 1, 2003, approximately 1,600 employees were transferred to Accenture Business Services for Utilities.



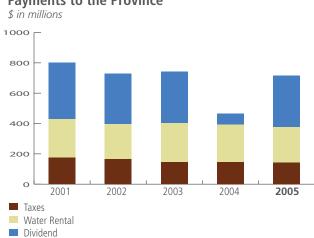
## **Total Requirements for Electricity and Sources of Supply**

for the years ended March 31		2005		20	004	20	03
	Generating Capacity (Megawatts)	Gigawatt Hours	%	Gigawatt Hours	%	Gigawatt Hours	%
Requirements							
Domestic	11 311	51 205	59.8	50 151	60.1	48 677	57.6
Trade		29 706	34.7	28 373	34.0	31 182	36.9
		80 911	94.5	78 524	94.1	79 859	94.5
Line loss and system use		4 660	5.5	4 969	5.9	4 689	5.5
		85 571	100.0	83 493	100.0	84 548	100.0
Sources Of Supply							
Hydroelectric generation							
Gordon M. Shrum	2 730	11 738	13.7	14 567	17.4	16 061	19.0
Revelstoke	1 980	7 283	8.5	7 552	9.0	8 094	9.6
Mica	1 805	5 993	7.0	6 389	7.7	6 926	8.2
Kootenay Canal	580	3 339	3.9	2 507	3.0	2 868	3.4
Peace Canyon	694	2 981	3.5	3 604	4.3	3 991	4.7
Seven Mile	790	3 039	3.6	2 867	3.4	2 919	3.4
Bridge River	475	2 597	3.0	2 555	3.1	2 366	2.8
Other	1 164	4 631	5.4	4 499	5.4	4 440	5.3
	10 218	41 601	48.6	44 540	53.3	47 665	56.4
Thermal generation							
Burrard	950	456	0.5	136	0.2	110	0.1
Other	143	325	0.4	312	0.4	300	0.4
Purchases under long-term	ı						
commitments		10 992	12.9	10 681	12.8	7 518	8.9
Purchases under short-tern	n						
commitments		32 637	38.1	29 042	34.8	30 560	36.1
Exchange-net		(440)	(0.5)	(1 218)	(1.5)	(1 605)	(1.9)
	11 311	85 571	100.0	83 493	100.0	84 548	100.0

# Financial Highlights

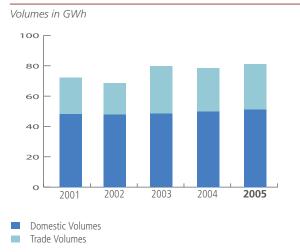


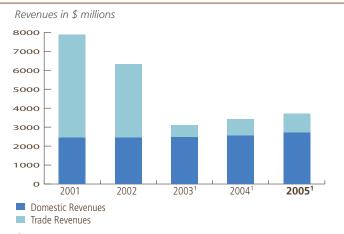
#### Payments to the Province



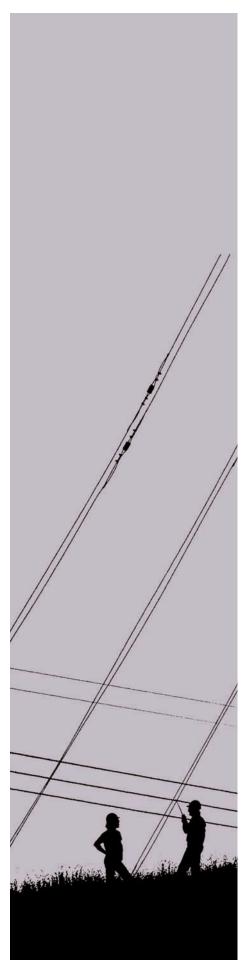
#### **Domestic and Trade Sales**

Power Smart (Demand-side management)





<sup>1</sup> During fiscal 2004, in response to changes in United States accounting standards, BC Hydro amended its accounting policy related to revenue recognition for trade activities that are supported by derivatives such as swaps, forward sales and options. The fiscal 2003 to 2005 trade revenues and costs associated with these derivatives are presented on a net basis in the Financial Statistics. For fiscal years prior to 2003, the trade revenues and costs have not been restated.



# Appendix BC Hydro's Long-Term Goals

CATEGORY	20-YEAR GOAL						
CUSTOMER							
1. Reliability (Customer)	Best-in-class reliability by customer segment						
2. Reliability (Supply)	Electricity self-sufficiency (energy and capacity) in B.C. for meeting all domestic needs						
3. Customer Satisfaction	To lead other companies in offering extraordinary value and service						
4. Remote Community Electrification	To provide appropriate electric service to all remote communities on an equitable basis						
EMPLOYEES							
5. Workplace	Among the Top 10 Best Employers in Canada						
6. Teamwork	All employees working collaboratively on one team to the benefit of all stakeholders						
7. Safety	To provide the safest work environment compared with the best performers in any industry						
	None of our employees will experience a serious safety injury						
SOCIAL							
8. First Nations	Improve relationships built on mutual respect and that appropriately reflect the interests of First Nations						
9. Stakeholder Engagement	To be the most respected company in B.C.						
10.Suppliers	100% of suppliers have demonstrated values congruent with those of BC Hydro						
ENVIRONMENT							
11. Environmental Impact	No net incremental environmental impact						
12. Electricity Conservation and Efficiency	Develop and foster a conservation culture in B.C. that leads to customers choosing to make a dramatic and permanent reduction in electricity intensity						
FINANCIAL							
13. Financial Targets	Maintain existing position of having costs among the lowest in North America						
	Deliver 100% forecast net income on an annual basis (after adjustments for uncontrollable factors like water volatility)						
ENABLERS							
14. Western Opportunities	To increase profits in the broader western market by leveraging our system and trading capabilities and implementing long-term investment and procurement strategies						
15. Innovation and Technology	To be an industry leader in innovation and use of new technology, directly supporting and advancing BC Hydro's long-term goals.						

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## Accenture Business Services for Utilities (ABSU)

Accenture Business Services for Utilities (ABSU) assumed responsibility for the performance of certain functions for BC Hydro on April 1, 2003. These functions include: Customer Services, Information Technology, Human Resources, Financial Systems, Purchasing, and Building and Office Services.

#### **B.C. Energy Plan**

A statement of B.C. government policy related to provincial energy matters issued by the Ministry of Energy and Mines in November 2002.

#### **Biomass**

Non-fossilized organic matter often used as fuel (e.g., wood waste).

# British Columbia Transmission Corporation (BCTC)

The Crown corporation created by the government of B.C. in 2003 to plan, operate and maintain BC Hydro's high-voltage transmission system.

## British Columbia Utilities Commission (BCUC)

An independent regulatory agency of the provincial government operating under and administering the Utilities Commission Act. Its responsibility is the regulation of public utilities under its jurisdiction and to ensure customers receive safe, reliable service and non-discriminatory, reasonable rates.

#### Carbon dioxide equivalent (CO<sub>2</sub>e)

The standard measure for greenhouse gas emissions, expressing the global warming potential of various gases over 100 years in terms of carbon dioxide equivalents.

#### **CFT**

Call for Tender.

# Certificate of Public Convenience and Necessity (CPCN)

A certificate issued to a public utility by a regulatory body such as the British Columbia Utilities Commission, for the construction or operation of a generating plant.

#### CFC-11

Chlorofluorocarbon (CFC), an ozone-depleting gas. CFC-11 is used in refrigerators, air conditioners, spray cans, solvents, foams and other applications.

#### cfs

Abbreviation for cubic feet per second.

#### $CH_{\Delta}$

Methane (natural gas).

#### CO

Carbon monoxide.

#### $CO_2$

Carbon dioxide.

#### **Clean Electricity**

B.C. Clean Electricity is defined as "alternative energy technologies that result in a net environmental improvement relative to existing energy production." Examples may include hydro, wind, solar, photovoltaic, geothermal, wave and biomass energy, as well as cogeneration of heat and power, energy from landfill gas and municipal solid waste, fuel cells and efficiency improvements at existing facilities.

#### Cogeneration

The simultaneous production of electrical or mechanical energy and useful heat energy from a single fuel source. For example, forest sector mills can burn wood waste in a boiler to generate electricity and use low-temperature steam from the generator in pulping processes.

#### COMA per customer (\$)

COMA per customer is defined as gross recurring capital expenditures (net of Telus recoveries) and operations, maintenance and administrative expenses divided by the total number of customers.

#### **Customer-Based Generation**

A BC Hydro initiative to buy electricity from large customers through a competitive bidding process.

#### Decile

Measured performance within the top 10 per cent or above the 90th percentile.

#### Decommission

To take a piece of equipment such as a generation or transmission facility permanently out of service.

#### Demand-Side Management (DSM)

Actions that modify customer demand for electricity, helping defer the need for new energy and capacity supply additions.

#### **Engineer-in-Training (EIT)**

A BC Hydro program that provides on-thejob training for qualified engineering graduates.

#### **Energy Purchase Agreement (EPA)**

The contract that defines the terms and conditions by which BC Hydro purchases electric energy from Independent Power Producers (IPPs).

#### **Equipment Health Rating (EHR)**

An objective, standardized condition assessment process for evaluating and reporting on equipment condition. EHR has been developed to evaluated six major equipment types (generators, exciters, turbines, governors, transformers and circuit breakers) and protective coatings.

# Federal Energy Regulatory Commission (FERC)

A U.S. agency that regulates the interstate transmission of natural gas, oil and electricity.

#### **First Nation**

Either an Aboriginal governing body, organized and established by an Aboriginal community, or the Aboriginal community itself.

#### First Ouartile

Measured performance within the top 25 per cent of a study, group or class or, above the 75th percentile.

#### Gigawatt hour (GWh)

One billion watt hours; one million kilowatt hours (an amount of electric energy that will serve about 100 residential customers for one year).

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#### Gigajoule (GJ)

One billion joules of energy. A joule (J) is a metric unit of measurement for heat energy.

#### **Greenhouse Gas (GHG)**

Gases that trap heat in the atmosphere and are thought to contribute to global climate change, or the "greenhouse effect," including carbon dioxide ( $CO_2$ ), methane ( $CH_4$ ), nitrous oxide ( $N_2O$ ) and sulphur hexafluoride ( $SF_6$ ).

#### **GHG** offset

A project that compensates for GHG emissions from one source by lowering, avoiding or capturing and storing emissions at another source.

#### **Global Reporting Initiative (GRI)**

A series of guidelines for sustainability reporting recommended by the GRI, a joint initiative of the U.S. non-government organization, Coalition for Environmentally Responsible Economies, and the United Nations Environmental Programme. Its goal is to enhance the quality, rigour and utility of sustainability reporting.

## Graduate Technologist-in-Training (GTT)

A BC Hydro program that provides the skills, knowledge and experience required to become a fully qualified technologist in one of four areas: Customer Projects & Operations, Protection & Control, Engineering and Transmission Maintenance.

#### **Green Power Certificates (GPCs)**

Green Power Certificates are a Power Smart product offering green electricity which is 100% generated in B.C. to domestic customers on a pilot basis. GPCs represent the environmental and social attributes of green electricity, separated from the electrons themselves. Each Green Power Certificate has a face value of one megawatt hour of electricity generated at qualified green generation facilities. Powerex, BC Hydro's power marketing subsidiary, is also piloting the sale of GPCs in the electricity marketplace.

#### ha

Hectares.

#### **Heritage Contract**

A 10-year, up to 49,000 gigawatt hour per year contract between BC Hydro's Generation and Distribution Lines of Business to ensure BC Hydro customers benefit from BC Hydro's existing low-cost hydroelectric and thermal resources.

#### Hydroelectricity

Electricity produced by harnessing the power of falling water or streamflow.

#### Integrated Electricity Plan (IEP)

The process of long-term planning of electricity generation, transmission facilities and demand-side resources to reliably meet forecast requirements.

#### **Independent Power Producer (IPP)**

Operator of a privately owned electricity generating facility that produces electricity for sale to utilities or other customers.

#### **Integrated System**

An interconnected network of transmission lines, distribution lines and substations linking generation stations to one another and to customers throughout a utility's service area, but excluding isolated customers who are connected to free-standing generating plants.

#### ISO

Independent System Operator.

#### ISO 14001

The international standard for environmental management, introduced by the International Standards Organization (ISO) in 1996 and updated in 2004

#### Kilotonne (kt)

One thousand metric tonnes.

#### Kilovolt (kV)

One thousand volts.

#### Kilowatt (kW)

One thousand watts; the commercial unit of measurement of electric power. A kilowatt is the flow of electricity required to light 10 100-watt light bulbs.

#### Kilowatt Hour (kWh)

One thousand watts used for a period of one hour; the basic unit of measurement of electric energy. On average, residential customers in B.C. use about 10,000 kWh per year.

#### **Kyoto Protocol**

The United Nations Framework Convention on Climate Change entered into force in 1994. The Kyoto Protocol, which sets out more specific, binding commitments, followed in 1997. The Protocol, which still requires ratification by other countries, seeks to reduce overall emissions of greenhouse gases such as CO<sub>2</sub> (carbon dioxide), CH<sub>4</sub> (methane), and N<sub>2</sub>O (nitrous oxide) by at least five per cent below 1990 levels in the commitment period of 2008 to 2012.

#### Large Final Emitter (LFE)

As defined by the federal government, LFE includes firms in both upstream and downstream oil and gas sectors, electricity generation and mining and manufacturing, such as cement plants and steel mills. The LFE Group has an aggregate greenhouse gas reduction target of 55 million tonnes per year.

#### **Load Forecasting**

Determining an estimate of load requirements for some future time.

#### Megatonne (Mt)

One million metric tonnes.

#### Megawatt (MW)

One million watts; one thousand kilowatts. A unit commonly used to measure both the capacity of generating stations and the rate at which energy can be delivered.

#### MLA

A Member of the Legislative Assembly. An elected member of the provincial legislature.

#### MWh

Megawatt hour (1,000 kilowatt hours/kWh).

#### $N_2$

Nitrogen.

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#### $N_2O$

Nitrous oxide.

#### **National Energy Board (NEB)**

A Canadian federal regulatory agency.

#### **Net Metering**

A program that allows customers with their own generation facility to "bank" their surplus electricity with the electric utility. This banked surplus is then applied against the amount of electricity supplied by the utility.

#### $NH_3$

Ammonia (anhydrous).

#### **Non-Integrated Areas**

Utility service areas that are not connected to the integrated system. These areas are supplied by local diesel generation or hydroelectric generation.

#### NOx

Oxides of nitrogen, including NO and  $NO_2$ , expressed as  $NO_2$  equivalent.

#### Outage

A planned or unplanned interruption of one or more elements of an integrated system.

#### **PCB**

Polychlorinated biphenyl, any of several toxic compounds containing two benzine molecules in which hydrogens have been replaced by chlorine atoms, formed as waste in industrial processes.

#### **Peak Capacity**

The maximum amount of electrical power that generating stations can produce in any instant.

#### **Peak Demand**

The maximum instantaneous demand on a power system. Normally the maximum hourly demand.

#### **PLT**

Power Line Technician.

#### PowerOn

The power outage reporting system for BC Hydro customers that provides information on the location and expected duration of outages.

#### **Power Smart**

BC Hydro's demand-side management (DSM) initiative to encourage energy efficiency by its customers. Launched in 1989, Power Smart includes a full range of DSM programs aimed at BC Hydro's residential, commercial and industrial customers.

#### psi

Pounds per square inch.

# Regional Transmission Organization (RTO)

A voluntary organization of transmission owners, operators and users currently developing in the western U.S. and Canada to facilitate wholesale transmission access.

#### **Resource Smart**

BC Hydro's program of improvements to existing power generation facilities to increase supply-side efficiency through physical and/or operational modifications.

#### Right-of-Way (ROW)

Rights to make use of land owned by another to allow the construction and operation of electrical transmission or distribution facilities.

#### SAIF

System Average Interruption Frequency Index (a reliability metric: average number of sustained interruptions that a transmission delivery point experiences per year).

#### SARI

System Average Restoration Index (a reliability metric: average restoration time for delivery point interruptions, in hours).

#### **Self-Generation**

Generation of electricity by an industry or commercial enterprise whose principal product is not electricity. Self-generation can reduce the amount of electricity purchased from the utility, or surplus electricity may be sold to the utility as a supply-side resource.

#### **Spot Market**

Real-time and day-ahead purchases and sales of electricity or other commodities; any market purchases or sales outside of long-term contracts.

#### **Stepped Rate**

A rate structure for transmission class customers, prescribed by the B.C. Energy Plan that will use different price levels so incremental consumption will be priced at incremental cost.

#### Stakeholder

Individuals, groups or representatives of groups who have an interest in BC Hydro's activities. First Nations, municipal governments, environmental organizations and employees are a few examples of BC Hydro's stakeholder groups.

#### Sulphur Hexafluoride (SF<sub>6</sub>)

A greenhouse gas used as an insulating and protective gas in transmission equipment.

#### **Supply-Side Management**

Actions that modify energy supply (e.g., load curtailment, time of use rates) to lower customer demand for energy particularly during periods of peak demand.

#### Tailwater

The water of a tailrace (a watercourse leading away from the turbine of a power station.

#### **Thermal Generation**

Generation of electricity by converting heat energy into electric energy through the controlled combustion of fossil fuels or biomass.

#### Triennial

Every third year.

## Vancouver Island Energy Corporation (VIEC)

A wholly owned subsidiary of BC Hydro that was the proponent of the Vancouver Island Generation Project.

nbla and regulated by an Independent body, the B.C. Utilitie

C). BC Hydro is one of North America's leading providers of a

Glossary

# Vancouver Island Generation Project (VIGP)

A proposed electricity generation station on Vancouver Island that will use a combined cycle gas turbine.

## Voluntary Challenge and Registry (VCR) Inc.

A non-government organization that encourages Canadian companies to voluntarily reduce GHG emissions and report on their progress.

#### **Water Licence**

The authority granted by the Comptroller of Water Rights of the Province of British Columbia to use, store and divert water.

#### Water Use Plan (WUP)

A plan, authorized under the B.C. Water Act, describing operating rules and boundaries for facilities on public waterways. BC Hydro's Water Use Plans are developed from a multi-stakeholder review process designed to address the varied interests for water use (e.g., fish, recreation and habitat management) associated with existing and new electricity generation and storage facilities.

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