



BC HYDRO ANNUAL REPORT

2009

BC hydro 
FOR GENERATIONS


**BRITISH
COLUMBIA**
The Best Place on Earth

ABOUT BC HYDRO'S ANNUAL REPORT

This report covers BC Hydro's performance for the period April 1, 2008, through March 31, 2009, and includes its major subsidiaries, Powerex Corp. and Powertech Labs Inc. The report was prepared for our shareholder, the British Columbia Provincial Government, and reflects BC Hydro's commitment to balance our business across three bottom lines: environmental, social and financial.

The performance targets referenced in this report were set out in our 2008/09 to 2010/11 Service Plan. 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. Throughout the fiscal year, BC Hydro reports on our financial performance through a series of Quarterly Reports. This Annual Report is a look back at this year, incorporating information also found in our Service Plan and Quarterlies.

To meet the requirements for both annual and triple bottom line reporting, this report is in accordance with British Columbia's *Budget Transparency and Accountability Act*, and Canadian generally accepted accounting principles (GAAP). It is also in compliance with the Global Reporting Initiative (GRI) G3 Guidelines. The Global Reporting Initiative has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. This framework sets out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. In addition to the measures found in the Annual Report, a comprehensive list of performance data that supports our commitment is available in the GRI comparative index online at BC Hydro's website: http://www.bchydro.com/about/company_information/reports/gri_index.html.

*The photos and sidebars in this report are courtesy of **Keeping Current**, BC Hydro's online employee newsletter; **Plugged In**, the quarterly print publication that is mailed to employees and their families; and/or BC Hydro employees.*

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LETTER FROM THE CHAIRMAN AND PRESIDENT AND CEO TO THE MINISTER



(L) Mossadiq S. Umedaly, Chairman

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

BC Hydro's 2009 Annual Report was prepared under the Board's direction in accordance with the *Budget Transparency and Accountability Act*, and in accordance with the Global Reporting Initiative G3 Guidelines.

This report represents a balanced presentation of BC Hydro's economic, environmental and social performance for the fiscal year ended March 31, 2009. All significant decisions, events and identified risks as of May 31, 2009, have been considered in preparing this report.

The information was prepared in accordance with the B.C. Reporting Principles and represents a comprehensive picture of our performance in relation to our 2008/09 to 2010/2011 Service Plan. The measures focus on aspects important to the company and are consistent with BC Hydro's values, purpose, goals and objectives.

The Board is responsible for ensuring internal controls are in place to measure and report on performance of the company in a timely fashion. This report contains estimates and interpretive information that represent the best judgment of management. Any significant limitations in the reliability of data are identified in the report.

OUR PEOPLE: MAKING A DIFFERENCE

As this year's Annual Report will attempt to highlight, all of BC Hydro's achievements are dependent upon the dedicated and talented employees that work at our facilities and offices across the province in roles as wide-ranging as dam engineers, designers, power line technicians, financial and energy planning experts, and all those working to establish a culture of conservation across the province.

We have approximately 5,800 people working at BC Hydro. In the past five years we have hired about 2,000 people. We have deliberately sought more diversity. Our workforce is younger, comes from around the world, includes many more women, and we have a greater mix of private and public experience.

On behalf of the Board, we'd like to thank the entire BC Hydro staff for their dedicated service to our customers.

We'd also like to acknowledge the 20th anniversary of our Power Smart program, and the visionary leader who made it all possible, former BC Hydro Chairman and CEO, Larry Bell.

Once again, energy saved through our Power Smart programs surpassed expectations and continued to deliver cost-effective energy over the last fiscal year, producing cumulative energy savings of 983 GWh, an increase of 657 GWh over fiscal 2008. This increased saving is equivalent to powering over 65,000 homes for a year.

It was also a year highlighted by a world-wide economic downturn that affected our business. For example, our load forecast was adjusted downwards reflecting expectations of reduced economic activity, in particular to our industrial customers.

BC Hydro operates within a triple bottom line framework. This includes a balance between financial and non financial performance targets. In fiscal 2009, we met or exceeded 10 of 14 non financial targets, such as the improved all injury frequency, improved employee engagement, and steady customer satisfaction over the previous year. We did not meet our reliability (customer) targets, due to transmission and substation outages, a largely overhead system of lines which are susceptible to trees falling on them, and distribution equipment failure. However, BC Hydro's reliability is also impacted by aging assets, adverse weather due to the nature of where we live

and the changing climate. In addition to the 14 non financial targets, we also have 10 financial measures. We met four of these in fiscal 2009. BC Hydro's net income was \$366 million which is comparable to the previous year and exceeds target. BC Hydro was also able to provide a return on equity of 12 per cent to our shareholder which is similar to the Service Plan targets. The remaining six metrics were below target. These were related to debt levels coverage, interest coverage and operating costs.

Meeting those performance targets safely is one of the highest priorities at BC Hydro. In fact, our all-injury frequency rate for fiscal 2009 is a performance record and a significant improvement on what we had forecast. We have made progress on increasing this focus on safety by introducing to employees improved planning, identification of hazards, and putting appropriate barriers in place. We believe these improvements are having a positive impact on the improved injury rate; however, we will not be able to identify that this is the primary reason for the improvement until we have further information over time.

Sadly, BC Hydro experienced two employee fatalities in fiscal 2009. Dirk Rozenboom and Rob Lehmann, both power line technicians, were killed in May 2008 in a helicopter crash while conducting a transmission line patrol at Cranbrook. The pilot and a pedestrian on the ground were also killed in the accident.

In response, we have implemented some of the recommendations of our internal investigation, including more rigorous assessment of when to use helicopters.

OUR PEOPLE: PLANNING FOR THE FUTURE

BC Hydro continues to be guided by the Province's 2007 BC Energy Plan: A Vision for Clean Energy Leadership. The Energy Plan calls on BC Hydro to meet two critical energy planning targets, which we have embedded in the Long Term Acquisition Plan (LTAP) that was filed with the British Columbia Utilities Commission (BCUC) in June 2008.

One of the targets is to become self-sufficient in energy and capacity by 2016. The other is to meet at least 50 per cent of our incremental resource needs through demand-side management by the year 2020. We are also ensuring that all new electricity projects have zero net greenhouse gas emissions, and that clean or renewable electricity continues to account for at least 90 per cent of total generation.

In fact, in the past fiscal year, clean or renewable generation accounted for 94 per cent of BC Hydro's electricity supply.

BC Hydro currently supplies electricity at one of the lowest carbon intensities in the world. Concern about greenhouse gas emissions is now a permanent part of utility planning and BC Hydro has developed a climate change strategy that will manage regulatory risk and ensure compliance, reduce greenhouse emissions and prepare for the impacts of climate change.

Greenhouse gas emission reduction targets have been established for the first time in the 2009/10 to 2011/12 Service Plan.

Ensuring that we have adequate supply to meet customer demand is a core focus for BC Hydro. Many of BC Hydro's dams and power-generating facilities were constructed decades ago. Therefore, BC Hydro is improving the health of our assets. Capital investment on generation assets has grown from \$90 million in fiscal 2001 to \$365 million in fiscal 2009. This will continue over the next five years – and likely beyond – as large projects move into the expenditure-intensive implementation phase.

During fiscal 2009, BC Hydro placed into service the redeveloped Aberfeldie Generating Station, a new 24-megawatt generating station to replace the old five-megawatt plant constructed in 1922. The first energy flowed from the new station in December 2008. Another project underway is the upgrade to the Revelstoke Generating Station where we are adding a fifth generating unit that will yield 500 MW of additional generating capacity. We are also evaluating options to meet growing customer demand in the Fort Nelson area and assessing the opportunities for installing a fifth and sixth generating unit at our Mica Generating Station.

BC Hydro's overall strategy also includes buying energy. During fiscal 2009, BC Hydro made considerable progress in advancing three competitive call processes for Independent Power Producers – the Standing Offer Program, Bioenergy Call and Clean Power Call.

Longer term, BC Hydro is taking a stage-by-stage approach to the evaluation of Site C, a potential third dam and hydroelectric generating station on the Peace River. Work during Stage 2, Project Definition and Consultation, involved extensive consultation as well as project engineering, environmental studies and other technical reviews.

BC Hydro will make a recommendation to the provincial government in fall 2009 on whether to proceed to Stage 3 of the potential project. BC Hydro will also issue a public report highlighting key findings during Stage 2.

Significant regulatory activity continued for BC Hydro in fiscal 2009. The BCUC issued decisions on the fiscal 2009/2010 Revenue Requirements Application and the Residential Inclining Block Rate Application. The former will help us meet the increasing costs of doing business, while the latter is a two-step rate that went into effect in October 2008 to encourage conservation.

BC Hydro also submitted its 2008 LTAP to the BCUC and an oral hearing took place in March 2009. As part of the LTAP, BC Hydro filed a 20-year demand-side management plan, which is expected to close approximately three-quarters of the gap between forecast consumption and currently available supply. As part of the demand-side management plan, roughly half of the electricity savings are expected to come from Power Smart programs, 30 per cent from government codes and standards and 20 per cent from conservation rate structures.

In fiscal 2009, BC Hydro developed an industry leading Smart Grid framework to support a common understanding of the Smart Grid among utilities, and we are using it to guide our vision of the modern grid.

OUR PEOPLE: STAYING CONNECTED

This was a pivotal year for BC Hydro in its efforts to foster relationships with aboriginal people in B.C. We concluded an agreement with Kwadacha First Nation and initialled an agreement with Tsay Keh Dene First Nation to address the historic social, economic and environmental impacts on their communities. We continue to consult with First Nations to understand and mitigate project impacts, and provide accommodation where appropriate.

As an official supporter of the Vancouver 2010 Olympic and Paralympic Winter Games, BC Hydro will provide clean power for the events. The electrical infrastructure and operational support planning for 17 mountain and city venues are on schedule with nine of the venues connected and the remainder targeted to be completed by summer 2009.

Finally, like other employers faced with an aging workforce and a competitive external labour market, we continued to place a high priority on the attraction and retention of employees in fiscal 2009. However, our retirement eligibility remains a moderate concern with 25 per cent of our current workforce eligible to retire within the next five years.

With over a third of our workforce having less than two years of service and half with less than five years, our company is undergoing a significant demographic transformation. This is a challenge for BC Hydro but also an opportunity. Along with our seasoned veterans, these are the new faces that will be planning and implementing the initiatives just described, now and in the years ahead, to ensure future generations of British Columbians enjoy the same benefits of clean, low-cost, reliable power that we have enjoyed for decades.

Sincerely,



Mossadiq S. Umedaly

Chairman



Bob Elton

President and CEO

ORGANIZATION OVERVIEW

BC HYDRO'S STRATEGIC FRAMEWORK



OUR MANDATE

BC Hydro is one of Canada's largest electric utilities. Our mandate includes to generate, manufacture, distribute, supply, purchase and sell electricity and meet the need in British Columbia in a cost-effective and reliable manner.

As a provincial Crown corporation, we receive guidance from the Province—as the shareholder—through several policy instruments, including a Shareholder's Letter of Expectations and the 2002 and 2007 Energy Plans. The government's expectations are expressed in three essential ways: legislation, policy and instructions.

Legislation: The most important longstanding piece of legislation governing BC Hydro is the *Hydro and Power Authority Act*, which gives us our mandate. Over the decades, the *Act* has been amended as BC Hydro's business operations have evolved. The creation of Powerex – to trade electricity – and the BC Transmission Corporation – to plan and operate the transmission system – reflect this evolution.

The *Utilities Commission Act* gives the British Columbia Utilities Commission (BCUC) the power to regulate BC Hydro to ensure that customers receive safe, reasonable, adequate and fair services. It also ensures that the government, as Shareholder, earns a fair return on its invested capital and that the competitive interests of B.C. businesses are not frustrated.

BC Hydro's assets also come under the terms of the *BC Hydro Public Power Legacy and Heritage Contract Act*. This act ensures public ownership of BC Hydro's Heritage Resources, which includes BC Hydro's transmission and distribution systems, and all of BC Hydro's existing generation and storage assets, and enabled the establishment of the Heritage Contract. The act also includes any future increases to the capacity and energy capability of these facilities.

Policy: The BC Energy Plan puts forward the government's vision and blueprint for the province's energy future. The most recent plan, released in 2007, "A Vision for Clean Energy Leadership", provides guidance to BC Hydro on how it should look to meet the future energy needs of British Columbians.

In particular, the BC Energy Plan sets a goal for BC Hydro to acquire 50 per cent of incremental resource needs through energy conservation and efficiency by 2020, while at the same time requiring that:

- all new electricity projects developed in B.C. will have zero net greenhouse gas emissions;
- existing thermal generation power plants will reach zero net greenhouse gas emissions by 2016;
- there will be zero greenhouse gas emissions from coal-fired electricity generation; and
- clean or renewable electricity generation will continue to account for at least 90 per cent of total provincial generation, placing B.C. among the top green jurisdictions in the world.

ORGANIZATION OVERVIEW

The plan also commits B.C. to being electricity self-sufficient by 2016. To make energy security a reality, the plan directs BC Hydro to do several things including:

- establish a standing offer for projects up to 10MW, a clean power call, and a bioenergy call for Independent Power Producers; and
- under provincial direction, enter into initial discussions with First Nations, the Province of Alberta and communities to discuss the potential development of a new dam at Site C on the Peace River.

Instructions: Government guidance also comes in the form of instructions, such as the Shareholder's Letter of Expectations, which regularly sets out objectives for BC Hydro to achieve in areas such as accountability, cost effectiveness and performance. For more information on this legislation and the policy direction from the provincial government, see the Appendices.

OUR PURPOSE AND VALUES

BC Hydro's purpose is to provide "Reliable Power, at Low Cost, for Generations." Our purpose, together with our vision outlined in our Guiding Principles, provides us with an enduring foundation for managing our business and allows us to develop and drive our core strategy of conserving, building and buying the electricity British Columbians need. At all times, our values of safety, accountability, integrity, service and teamwork guide our actions.

OUR SHORT-TERM PRIORITIES AND GUIDING PRINCIPLES

For fiscal 2010, BC Hydro's Long-Term Goals, which were adopted along with our purpose, in 2004, have been renamed "Guiding Principles", recognizing that they are aspirational in nature. However, each of the Guiding Principles remain unchanged, and combined with our purpose and our five values, continue to provide the framework that governs how we operate. In this report, we will refer to the long-term goals as Guiding Principles.

We have also made two changes to our short-term priorities in the 2009/10 to 2011/12 Service Plan to better reflect our evolving focus and government directions. For fiscal 2010, we have:

- re-named Reliability (Supply) as Electricity Security (Supply), and
- formally established Climate Change and Environmental Impact as a separate short-term priority from Energy Conservation and Efficiency.

These changes will be reflected in our fiscal 2010 Annual Report. In this report, we will refer to the short-term priorities using the language laid out in the 2008/2009 to 2010/11 Service Plan. However, we will order the priorities to better reflect the changes that will occur in fiscal 2010.

OUR CORE STRATEGY

BC Hydro's core strategy is to conserve, build and buy to provide the electricity British Columbians need. We are focussed on our short-term priorities and in taking action on the projects and initiatives that will make these goals a reality. Conserving is the first and best choice for us to meet B.C.'s forecasted electricity needs in the future. By helping customers be more efficient, use their power wisely, and ultimately use less, we can collectively lower the new supply that will be needed. The second way for us to meet B.C.'s needs is to build by making important reinvestments in our heritage hydroelectric assets and by exploring potential new large-scale investments, such as Site C, a third hydroelectric facility on the Peace River. The third part of our strategy is to buy more. Even though conservation is to meet over half of our future electricity needs, BC Hydro will still consider other cost-effective, made-in-B.C. resource options to meet the balance of our requirements. For more information on our strategy see the 2009/10 to 2011/12 Service Plan.

STRUCTURED DECISION MAKING

To achieve our purpose and Guiding Principles, BC Hydro continues to integrate financial, environmental, and social considerations (the triple bottom line) into how we plan and manage our business. This is included in our decision-making processes across the company and at the Board level.

OUR ORGANIZATIONAL STRUCTURE

See Corporate Governance (page 11) for information on BC Hydro's organizational structure.

OUR SYSTEM

BC Hydro is the largest electric utility in British Columbia, operating 31 hydroelectric facilities and three thermal generating plants. Most of BC Hydro's 11,300 megawatts (MW) of installed generating capacity is located away from the province's major population centres.

Our hydroelectric facilities provide 90 per cent of the total electricity we generate—between 43,000 and 54,000 gigawatt hours (GWh) of electricity per year—and are located throughout the Peace, Columbia and Coastal regions of B.C. Our three thermal generating plants provide the remaining 10 per cent of total electricity generation.

We deliver electricity to our customers through a network of over 18,000 kilometres of transmission lines and 56,000 kilometres of distribution lines. This network also includes 888,399 utility poles and 323,238 transformers.

BC Hydro also serves 17 communities that are not connected to our integrated system. These non-integrated areas are typically small, remote communities, served by local generating stations owned by BC Hydro, Independent Power Producers (IPPs) or the communities themselves.

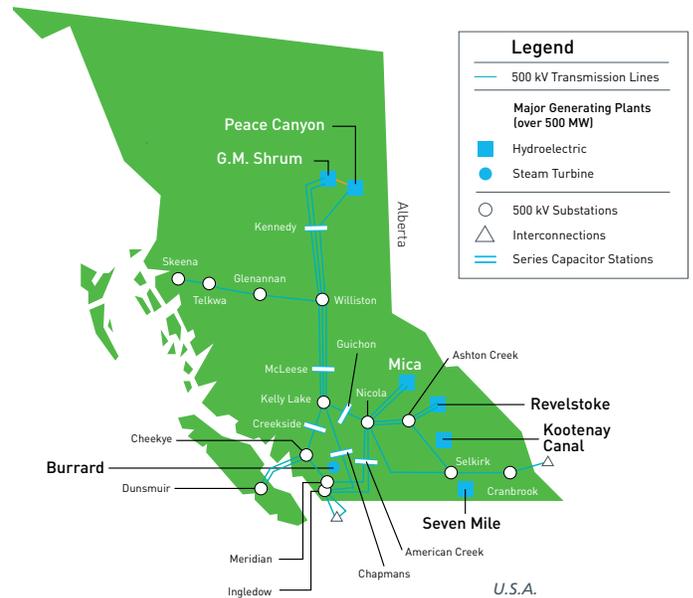
To meet the growing demand for electricity, BC Hydro also contracts with IPPs to buy electricity on a long-term basis, and buys power externally in the wholesale electricity markets through Powerex, our energy marketing and trading subsidiary, on a short-term basis.

CANADIAN ENTITLEMENT

The Columbia River Treaty between Canada and the United States was ratified in 1964. The Treaty resulted in the construction of three dams in British Columbia—the Duncan, Keenleyside and Mica dams—for flood control and to increase hydroelectric generating potential in both countries. The Treaty also gave the U.S. the right to build Libby Dam.

Canada's share (one-half) of the extra power produced in the U.S. as a result of the Canadian projects is called the Canadian Entitlement to downstream benefits and is owned by the Province of B.C. and administered by BC Hydro. The Canadian Entitlement varies from year to year, but is generally in the range of 4,400 GWh per year and about 1,250 MW of capacity. The earliest termination date for the Columbia River Treaty is September 2024, subject to either country giving a minimum 10 years notice of its intent to terminate.

500 kV transmission system and major generating stations



BC Hydro has corporate centres in Vancouver and Burnaby, and has a presence in more than 50 communities across the province through its regional offices.

CUSTOMERS

BC Hydro serves 95 per cent of B.C.'s population, delivering electricity safely and reliably at competitive rates to approximately 1.8 million customers. Eighty-eight per cent of our customer accounts are residential, with the remainder either commercial or industrial. Each of these three groups consumes roughly one third of the total electricity we supply.

RATES AND REGULATION

The BCUC must approve the rates BC Hydro charges for electricity. The rates allow us to recover costs incurred in serving our customers, including earning a return on equity. Both the definition of equity and the method to determine an appropriate return on this equity are defined by Special Directions from the B.C. Government. The Special Directions require annual dividend payments to the B.C. Government of 85 per cent of our net income, adjusted for capitalized finance charges and related amortization, as long as our debt to equity ratio is not greater than 80:20. For more information on the regulatory process see page 55.

WHOLLY-OWNED SUBSIDIARIES

POWEREX CORP.

Powerex is a key participant in energy markets across North America, buying and supplying wholesale power, natural gas, ancillary services, financial energy products and, more recently, environmental products with an ever-expanding list of trade partners. Established in 1988, its energy marketing and trade activities help optimize BC Hydro's electric system resources and provide significant economic benefits to the people of British Columbia.

POWERTECH LABS INC.

Powertech has been providing consulting and testing services to electric utilities, gas companies, automotive manufacturers and others since 1989. Powertech combines unique testing capabilities with multidisciplinary, expert technical staff to help clients solve energy related problems. Embarking on a new strategic direction in 2008, Powertech is focused on becoming a world class leader in implementing clean energy solutions to create value for BC Hydro and British Columbia.

STRATEGIC PARTNERS

BRITISH COLUMBIA TRANSMISSION CORPORATION

BC Hydro and British Columbia Transmission Corporation (BCTC) operate as two independent Crown Corporations. There are significant interdependencies between the two organizations as BCTC is responsible for planning, operating and managing BC Hydro's transmission system. The strong partnership between BCTC and BC Hydro continues to benefit our customers with a coordinated approach to system planning that ultimately provides them with reliable power.

ACCENTURE BUSINESS SERVICES OF BRITISH COLUMBIA

BC Hydro implemented an outsourcing strategy with Accenture Business Services of British Columbia (ABSBC) under a 10-year agreement, effective April 1, 2003. On any given day, thousands of transactions are handled by ABSBC in the areas of Customer Care, Information Technology, Human Resources, Financial Systems and Building and Office Services. Together with ABSBC, BC Hydro has been able to improve performance, advance customer satisfaction and achieve total gross savings of approximately \$150 million to date.

INDEPENDENT POWER PRODUCERS (IPPs)

BC Hydro's electricity procurement plays a critical role in reaching the BC Energy Plan's objective of achieving electricity self sufficiency by 2016, as well as meeting the B.C. Government's policy actions for maintaining competitive rates, clean or renewable electricity and the development of a vibrant and competitive IPP sector.

Currently, BC Hydro has 89 Electricity Purchase Agreements (EPAs) with IPPs, including four EPAs in non-integrated areas, representing about 14,400 GWh/year of energy purchases. Of these agreements, 48 projects are in operation with most of the remaining projects scheduled to reach commercial operation by the end of fiscal 2011. During fiscal 2009, IPPs provided almost 8,400 GWh of energy to the BC Hydro system, which accounted for about 14 per cent of total domestic electricity requirements. We will continue to collaborate with IPPs, customers, Government, BCTC and First Nations to improve the procurement process for electricity and to design competitive call terms and conditions. For more information on BC Hydro's Calls for Power, see page 40.

CORPORATE GOVERNANCE

DIRECTORS, OFFICERS AND EXECUTIVE OF BC HYDRO

The BC Hydro Board of Directors oversees the conduct of business and supervises Management, which in turn is responsible for the day-to-day operations of BC Hydro. Directors are appointed by the B.C. Government to bring special skills and experience to the Board's deliberations.

The Board's responsibilities include:

- ensuring there is a strategic and business planning process, and then reviewing, validating and endorsing a strategy for the Corporation and monitoring its implementation,
- ensuring effective controls and appropriate governance are in place as part of its Management oversight, and
- continuing to understand the principal risks associated with the Corporation's business and ensuring that the appropriate processes and systems are in place to mitigate risk.

BC Hydro regularly reviews and updates its governance framework to ensure the various components meet the corporation's ongoing business needs while being consistent with government's Guiding Principles on Crown Agency Corporate Governance.

The Board acts in accordance with the Best Practices Guidelines for Governance, and Disclosure Guidelines for Governing Boards of BC Public Sector Organizations, which can be found at www.lcs.gov.bc.ca/brdo/governance/.

MEMBERSHIP OF BOARD OF DIRECTORS AND BOARD COMMITTEES

The Board of Directors of BC Hydro is composed entirely of individuals which are independent of management. Many of the Board's responsibilities are carried out by Committees of the Board, Task Groups, or Advisory Committees which make recommendations to the Board of Directors. These Committees and Task Groups are comprised entirely of Board Members.

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

Terms of reference for the Board and its Committees, the Chairman, the Chief Executive Officer and the Corporate Secretary are published on the BC Hydro website. The number of Board and Committee meetings in fiscal 2009 are set out in BC Hydro's corporate governance disclosure at www.bchydro.com. In addition to the number of Board and Committee meetings, Board responsibilities, Director biographies and Director attendance records are also disclosed.

BOARD OPERATIONS

Subscribing to a principle of continuous improvement, board performance and its make-up is evaluated annually to ensure that the Board of Directors performs its due diligence and policy oversight role in the most effective manner. For more information on the Board's roles and responsibilities, visit www.bchydro.com/about/company_information/board_committees.html.

CODE OF CONDUCT

To promote awareness and understanding of the standards of conduct that BC Hydro expects we have a Director and Employee Code of Conduct, which includes information on avoiding conflicts of interest. For more information on BC Hydro's Code of Conduct visit www.bchydro.com/about/company_information/code_of_conduct.html.

GOVERNANCE AND DISCLOSURE GUIDELINES FOR BRITISH COLUMBIA PUBLIC SECTOR BOARDS

Best Practice Guidelines on Governance and Disclosure were issued by government in 2005. BC Hydro's response to the 12 disclosure requirements is updated annually and posted on our website.

ORGANIZATIONAL STRUCTURE – EXECUTIVE OF BC HYDRO

BC Hydro's organizational structure is designed to ensure we deliver on our Guiding Principles and to facilitate coordination among business functions. The structure includes operational business groups, a corporate function and two subsidiaries, Powerex and Powertech (see page 10 for more information on our subsidiaries). As of March 31, 2009, we had 5,844 employees (regular and temporary employees, full-time count as one, part-time count as 0.5).



BOARD OF DIRECTORS

MANDATE: The Board is responsible for overseeing the conduct of business, supervising management and ensuring all major issues affecting the Corporation are given proper consideration. The Board, through the Chief Executive Officer, sets the standards of conduct for BC Hydro and ensures the safety of its operations.

CHAIRMAN: Mossadiq Umedaly

MEMBERS: Chief Kim Baird (appointed April 10, 2008), James Brown (appointed June 6, 2008), Peter Busby (appointed April 10, 2008), Wanda Costuros, Jonathan Drance (appointed May 8, 2008), Tracey McVicar, Nancy Olewiler, Peter Powell (appointed May 8, 2008), Walter Saponja, Donald Triggs (appointed June 6, 2008)

Brenda Eaton (resigned December 18, 2008)

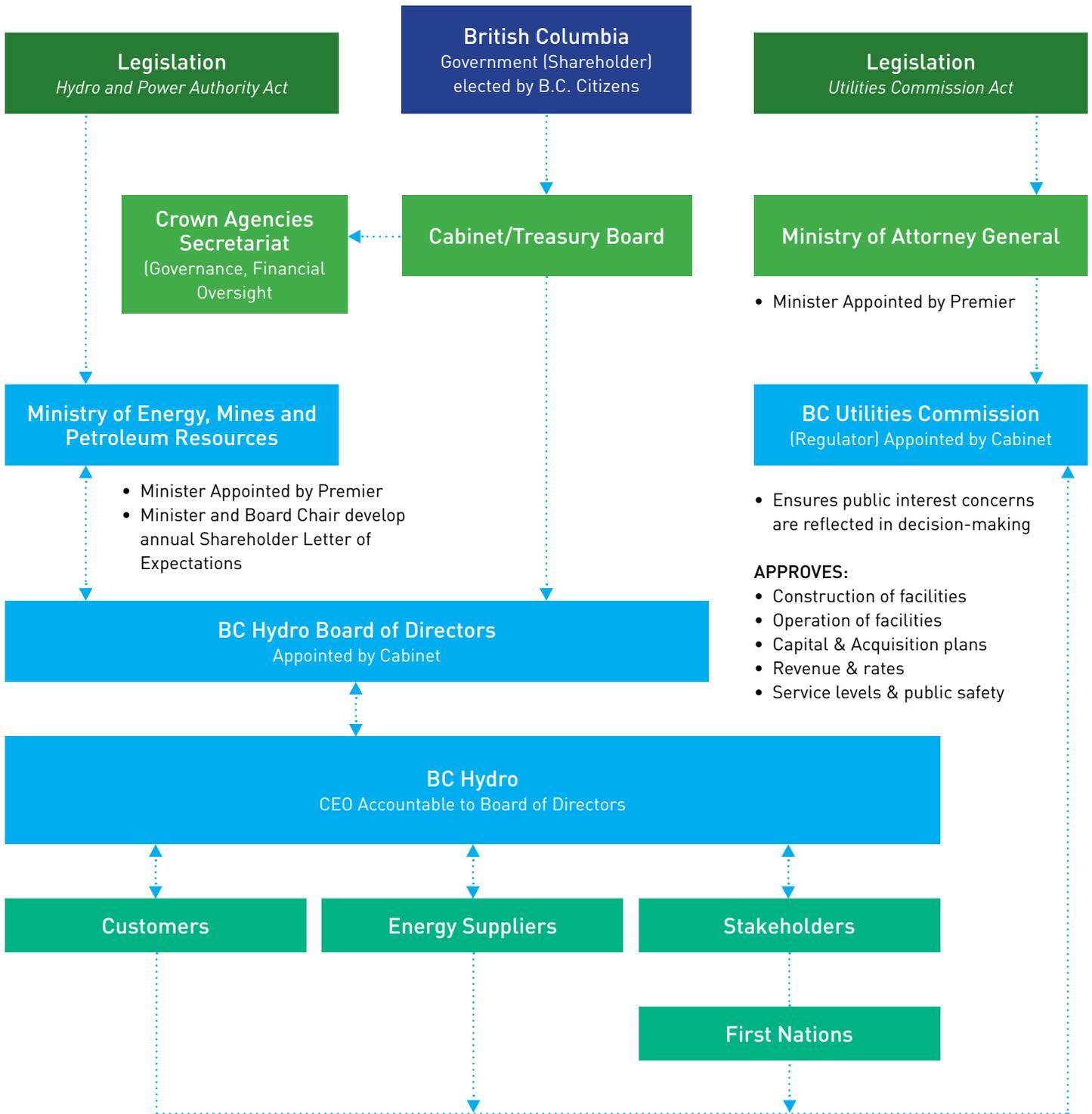
COMMITTEES OF THE BOARD	
EXECUTIVE COMMITTEE	<p>PURPOSE: The Executive Committee meets only in special circumstances. It has most of the powers of the Board to act in situations when, for timing reasons, a Board meeting cannot be scheduled.</p> <p>CHAIRMAN: Mossadiq Umedaly</p> <p>MEMBERS: Wanda Costuros, Jonathan Drance (appointed November 19, 2008) Brenda Eaton (resigned December 18, 2008)</p>
AUDIT AND RISK MANAGEMENT	<p>PURPOSE: The Audit and Risk Management 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.</p> <p>CHAIR: Tracey McVicar</p> <p>MEMBERS: Wanda Costuros, Peter Powell, Walter Saponja, Mossadiq Umedaly*</p> <p>Nancy Olewiler (no longer a Committee Member, November 19, 2008), Brenda Eaton (resigned December 18, 2008)</p>
CORPORATE GOVERNANCE	<p>PURPOSE: The Corporate Governance Committee assists the Board 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.</p> <p>CHAIR: Jonathan Drance</p> <p>MEMBERS: Tracey McVicar (appointed November 19, 2008), Donald Triggs (appointed November 19, 2008), Mossadiq Umedaly*</p> <p>Wanda Costuros (no longer a Committee Member, November 19, 2008), Brenda Eaton (resigned December 18, 2008)</p>
HUMAN RESOURCES	<p>PURPOSE: The Human Resources Committee assists the Board in fulfilling its obligations relating to human resources and compensation issues, related specifically to senior management and generally to the Corporation. The Committee also monitors safety performance.</p> <p>CHAIR: Nancy Olewiler</p> <p>MEMBERS: James Brown (appointed November 19, 2008), Jonathan Drance (appointed November 19, 2008), Donald Triggs (appointed November 19, 2008), Mossadiq Umedaly*</p> <p>Chief Kim Baird (no longer a Committee Member, November 19, 2008), Walter Saponja (no longer a Committee Member, November 19, 2008),</p>
CAPITAL PROJECTS formed: November 19, 2008	<p>PURPOSE: The Capital Projects Committee assists the Board in fulfilling its obligations and oversight responsibilities relating to the Corporation's long-term capital plans, capital budgets and capital projects, including risk identification and management, dam safety, Aboriginal Relations and negotiations, and transmission projects.</p> <p>CHAIR: Walter Saponja</p> <p>MEMBERS: Chief Kim Baird, Jonathan Drance, Peter Powell, Mossadiq Umedaly*</p>

COMMITTEES OF THE BOARD *continued*

<p>CONSERVATION COMMITTEE (Task Group)</p>	<p>PURPOSE: The Conservation ad hoc task group of the Board of Directors assists the Board by monitoring and supporting the implementation of an energy conservation strategy as described by the BC Energy Plan.</p> <p>CHAIR: Peter Busby</p> <p>MEMBERS: Chief Kim Baird (appointed November 19, 2008), Nancy Olewiler, Mossadiq Umedaly* Brenda Eaton (resigned December 18, 2008)</p>
<p>THE PEACE RIVER / WILLISTON RESERVOIR ADVISORY COMMITTEE</p>	<p>The Board appoints Advisory Committees from time to time. This Advisory Committee provides advice and facilitates two-way communications between the Peace/Williston community and BC Hydro. Committee membership is composed of local community leaders, providing equitable representation from geographical and special interest groups within the region.</p> <p>CHAIR: Jack Weisgerber</p> <p>MEMBERS: Lori Ackerman (Fort St. John), Rick Hopkins (Fort St. John), Gwen Johansson (Hudson's Hope), Terry Johnson (Taylor), Kevin Neary (MacKenzie), Leigh Summer (Hudson's Hope), Ron Terlesky (MacKenzie), Donny Van Somer (Kwadacha First Nation)</p> <p>Don Bourassa (Dawson Creek) (resigned February 18, 2009), Chief Johnny Pierre (Tsay Keh Dene First Nation) (no longer on Committee due to Tsay Key Dene leadership change, November 2008)</p>
<p>POWEREX CORP. Board meetings: 5 Audit and Risk Management Committee: 5 Strategy session: 1</p>	<p>SUBSIDIARIES</p> <p>CHAIR: Wanda Costuros</p> <p>BOARD MEMBERS: James Brown (appointed November 19, 2008), Bob Elton, Peter Powell, Walter Saponja, Mossadiq Umedaly (appointed July 2, 2008)</p> <p>OFFICERS: Wanda Costuros (Chair), Teresa Conway (President and CEO), Michael Standbrook (Acting Chief Financial Officer, term ended March 6, 2009), Myra Watson (Corporate Secretary, resigned August 29, 2008), Diana Seehagen (Assistant Corporate Secretary, resigned September 26, 2008), Michael Lee (Acting Corporate Secretary, October 9, 2008 to March 31, 2009)</p>
<p>POWERTECH LABS INC. Board meetings: 7</p>	<p>EXECUTIVE CHAIRMAN: Mossadiq Umedaly</p> <p>BOARD MEMBERS: Brenda Eaton, Nancy Olewiler</p> <p>OFFICERS: Mossadiq Umedaly (Executive Chairman), Eamonn Percy (President and Chief Operating Officer), Myra Watson (Corporate Secretary, resigned August 29, 2008), Diana Seehagen (Assistant Corporate Secretary, resigned September 26, 2008), Michael Lee (Acting Corporate Secretary, October 9, 2008 to March 31, 2009)</p>

**The Board Chairman is an ex-officio member of all Committees.*

SHAREHOLDER-REGULATORY RELATIONSHIP FRAMEWORK



REPORT ON PERFORMANCE

This section reports on our short-term priorities and targets as outlined in the 2008/09 to 2010/11 Service Plan. Each of our Guiding Principles remain unchanged, and combined with our purpose and five values, continue to provide the framework that governs how we operate. For our short-term priorities, we assign specific targets and measures to assess progress. All of BC Hydro's 15 Guiding Principles including the short-term priorities are referenced in the Appendices.

Short-Term Priorities	Description
Safety	To provide the safest work environment compared with the best performers in any industry, where none of our employees will experience a serious safety injury.
People	To be the top employer for generations and to use exceptional teamwork to engage all employees.
Reliability (Customer)	To provide electricity self-sufficiency (energy and capacity) in B.C. for meeting all domestic needs, and to have the best-in-class reliability by customer segment. <i>For fiscal 2010, the priority of Reliability (Customer and Supply) has been separated. This section will be called Reliability (Customer). The Reliability (Supply) portion is reflected below.</i>
Customer Satisfaction	To lead by offering extraordinary value and service.
Reliability (Supply)	To provide electricity self-sufficiency (energy and capacity) in B.C. for meeting all domestic needs, and to have the best-in-class reliability by customer segment. <i>For fiscal 2010, the priority of Reliability (Customer and Supply) has been separated. This section will be called Electricity Security (Supply).</i>
Climate Change, Energy Conservation and Efficiency	To develop and foster an energy conservation and efficiency culture in B.C. that utilizes technology to lead customers to choose a dramatic and permanent reduction in the use of electricity. <i>For fiscal 2010, this priority has been separated into Energy Conservation and Efficiency, and Climate Change and Environmental Impact.</i>
Financial Targets	To maintain the existing position of having costs among the lowest in North America and to deliver 100 per cent of forecast net income on an annual basis.

HOW WE MEASURE OUR PERFORMANCE

BC Hydro uses a series of measures to guide business performance and progress. Some of these measures are tracked monthly, while others are tracked quarterly, semi-annually and annually. BC Hydro continues to develop leading measures where practical to determine if progress on meeting our goals is on track and to identify where adjustments need to be made. Measures are results-based to provide a more accurate evaluation on our performance. We also participate in benchmarking studies to determine where improvement may be required.

A LOOK BACK ON PERFORMANCE FOR FISCAL 2009

Guiding Principles	Performance Measure	F2007 Actual	F2008 Actual	F2009 Target	F2009 Actual	F2010 Target	F2011 Target	F2012 Target
SAFETY	Severity (Number of calendar days lost due to injury per 200,000 hours worked)	31	39	25	32	23	20	17
	All Injury Frequency (Number of employee injury incidents per 200,000 hours worked)	2.4	2.8	2.4	1.4	2.3	2.2	2.0
PEOPLE	Vacancy Rate (%)	9.0	8.7	9.9	6.9	8.0	8.0	7.6
	Employee Engagement (mean score out of five on the Employee Engagement Survey)	NR	3.32 ¹	3.55	3.61	3.60	3.65	3.65
RELIABILITY (CUSTOMER)	CAIDI (hours)	2.16	2.24	2.15	2.47	2.15	2.15	2.15
	SAIFI (frequency)	1.33	1.52	1.31	1.67	1.27	1.22	1.22
	CEMI-4 (%)	7.30	8.56	9.00	11.57	8.50	8.00	8.00
CUSTOMER SATISFACTION	CSAT Index (% of customers satisfied or very satisfied)	NR	90	80	90	80	80	80
	Billing Accuracy (% of accurate bills)	98.5	98.5	98.2	98.5	98.2	98.2	98.2
	First Call Resolution (% of customer calls resolved first time)	NR	71	66	75	66	66	66
RELIABILITY (SUPPLY)	Winter Generation Availability Factor (%)	96.2	94.9	96.2	96.4	96.3	96.4	96.4
ENERGY CONSERVATION & EFFICIENCY	Demand Side Management (GWh/year, cumulative since F2008)	NR	326	761 ²	983	1,700	2,600	3,800
CLIMATE CHANGE & ENVIRONMENTAL IMPACT	Clean Energy (%)	NR	94	90	94	90	90	90
	Greenhouse Gas Emissions (million tonnes CO ₂ e)	NR	1.50	1.60	1.47	1.55	1.50	1.45

A LOOK BACK ON PERFORMANCE FOR FISCAL 2009 *continued*

Guiding Principles	Performance Measure	F2007 Actual	F2008 Actual	F2009 Target	F2009 Actual	F2010 Target	F2011 Target	F2012 Target
FINANCIAL	FINANCIAL EFFICIENCY							
	Net Income (After Regulatory Accounts) (\$ in millions)	407	369	358	366	452	493	542
	Return on Assets (%)	6.9	5.2	5.6	2.6	5.2	5.5	5.5
	Return on Regulatory Equity (%)	13.44	11.33	11.78	11.75	13.05	13.05	13.05
	EBIT Interest Coverage	1.85	1.49	1.41	0.78	1.56	1.57	1.52
	Debt to GAAP Equity (%)	80	80	80	81	80	80	80
	OPERATIONAL EFFICIENCY							
	Operating Costs³ (non-fuel)/MWh Delivered (\$)	11.76	11.14	12.27	13.27	15.08	14.60	15.13
	Operating Costs³ (non-fuel)/ Transmission and Distribution Line km (\$)	8,401	8,057	8,973	9,251	10,610	10,261	10,526
	Operating Costs³ (non-fuel)/ Customer (\$)	362	344	377	387	440	442	429
	Operating Cash Flow Post Dividend to Net Capital Expenditure (%)	32	47	40	44	44	36	37
	Transmission and Distribution Capital Expenditure/ Transmission and Distribution Line km (\$)	7,309	8,597	13,711	12,317	12,192	12,825	11,712

¹ The fiscal 2008 employee engagement actual has been changed from 3.36 to 3.32 to account for slightly revised calculation methodology that occurred with the fiscal 2009 survey.

² The fiscal 2009 target set out in the fiscal 2008/09 – F2010/11 Service Plan was rounded to 700 GWh/year. The target shown above for fiscal 2009 was included in the 2008 LTAP filing and represents the actual target.

³ Operating costs exclude DSM, Site C and other regulatory expenditures as these are not related to efficiency, and exclude any fuel associated with the cost of energy.

NEW SERVICE PLAN MEASURES FOR FISCAL 2010

BC Hydro uses a variety of measures to guide business performance and progress and to evaluate whether a particular short-term priority is on track. We review our reporting framework regularly to ensure we maintain a comprehensive overview of our performance. For fiscal 2010, we will be reporting on all the metrics noted on pages 17 and 18. In addition, we will be adding one new metric within the Climate Change and Environmental Impact short-term priority:

CARBON NEUTRAL PROGRAM EMISSIONS

(thousand tonnes CO₂e)

	F2010	F2011	F2012
Target	25.5	25.0	24.1

The Carbon Neutral Program Emissions metric includes carbon dioxide equivalent (CO₂e) emissions from vehicle fleet fuel combustion, building heating and cooling, building electricity use, and paper consumption, in accordance with the Province's guidelines for Crown corporations.

SAFETY



GUIDING PRINCIPLE:

To provide the safest work environment compared with the best performers in any industry where none of our employees experience a serious safety injury.

The Safety Practices Committee (SPC) has members from across BC Hydro. They are the governing authority over our Safety Practice Regulations (SPRs). The SPRs are the main set of rules which govern workers who access and work on the power system. Safety Practices Committee (Left to Right): Glen Peters, Terry Receveur, Eric Nadin, Steve Fowles, Bob Hirschfield, Jan Kehl (resigned from Committee, May 7, 2009), Bruce Misewich and Donna Barker.

BC Hydro recognizes that the operation of the electrical power system is hazardous and the risks must be actively managed to protect people, property and the environment. We mitigate the impact of these hazards by identifying them, implementing barriers and using quality safety design, construction, maintenance and education programs to protect against them.

In fiscal 2009, we made great strides in terms of looking for ways to prevent incidents from happening through our Safety by Design, Job Planning, Job Observation and Incident Investigation programs. Based on our dam safety audits, we have world-leading dam safety practices. In terms of our Service Plan targets, we were successful in achieving a low All Injury Frequency rate, the lowest ever for BC Hydro.

Delivering electricity safely also involves keeping a well-maintained electrical system and deterring an array of threats, such as vandalism and theft, while anticipating and responding to the impacts of natural disasters such as storms, floods and forest fires through emergency planning and preparations.

STRATEGIES IN THE 2008/09-2010/11 SERVICE PLAN:

In last year's Service Plan, we stated we would focus on a reduction in the frequency of serious work-related injuries by:

- identifying hazards and eliminating them where possible, and
- managing and controlling hazards through the use of barriers, procedures and other measures when hazards cannot be eliminated, to minimize the risks to our employees.

SAFETY

EMPLOYEE SAFETY

In fiscal 2009, we continued applying safety by design principles to our standards and at our facilities. We also continued to actively identify hazards through more effective job planning. Through workshops, we introduced the concepts of hazards and barriers to Operations and Engineering employees. We also began using Tripod Beta, an advanced investigation tool that helps to identify potential accident causes that evade traditional methodologies, and to rigorously investigate incidents as a means of preventing future ones.

Sadly, BC Hydro experienced two employee fatalities in fiscal 2009. Dirk Rozenboom and Rob Lehmann, both power line technicians, were tragically killed in May 2008 in a helicopter crash while conducting a transmission line patrol in Cranbrook. The pilot and a pedestrian on the ground were also killed in the accident. The internal investigation report into the May 2008 Cranbrook helicopter crash has been completed and posted internally. While the Transportation Safety Board has not publicly released their investigation report, we have implemented some of the recommendations, including more rigorous assessment of when to use helicopters. We have worked with our industry peers to identify and leverage best practices, and are adopting a risk assessment model similar to that used by Southern California Edison.

On September 13, 2008, there was a severe electrical contact incident in Invermere involving two BC Hydro power line technicians, resulting in serious injuries to the employees. BC Hydro has presented and submitted our investigation report to WorkSafeBC regarding the Invermere incident. WorkSafeBC will now review our report, including our findings and corrective action plan, and finalize their independent investigation.

INJURY STATISTICS

The all injury frequency (AIF) rate of 1.4 for fiscal 2009 is a BC Hydro performance record and significantly improves on our target of 2.4. The majority of the incidents this fiscal year were minor and did not represent a serious long-term risk to employees. We have increased our focus on safety by introducing employees to improved planning, identification of hazards, and putting appropriate barriers in place. We believe these improvements are having a positive impact on the much improved injury rate; however, we will not be able to identify that this is the primary reason for the improvement until we have further information over time.

With respect to injury severity, we did not meet our target of 25 (number of calendar days lost due to injury per 200,000 hours worked), mainly as a result of the Invermere incident and a small number of vehicle-related injuries that contributed a significant number of lost days to the total. We believe that continued emphasis on the elimination of high-risk hazards and continued focus on hazards and barriers as mentioned above will lead directly to a reduced severity rate over time.



In fiscal 2009, the Fort Nelson Generating Station received a Gold Merit Certificate from the BC Safety Council. The employees at the natural-gas fired generating facility were awarded the distinction for reaching 115,980 hours with no lost time to accidents for a facility of its size. Photo credit: James Norcross, Plant Manager, Fort Nelson Generating Station.

SAFETY

SEVERITY

Number of days lost due to injury per 200,000 hours worked
lower is better



Severity is a standard Canadian Electricity Association (CEA) measure and is defined as the number of calendar days lost due to injury per 200,000 hours worked. The Severity metric does not include data on fatal incidents. One or two injuries can have a major impact on severity and in fiscal 2009, the two injuries resulting from the Invermere incident did significantly raise the Severity result.

We recognize that severity does not appear to be improving. Once we have reduced the serious injury frequency over the next two to three years, we will shift our focus to less serious and minor injuries. We expect AIF and Severity will then start to reduce more quickly. For comparison, in 2007 the CEA composite AIF was 3.0 while Severity was 16.

PUBLIC SAFETY

Public awareness, education and training are significant components of BC Hydro's efforts to manage public safety risks. We focus our electrical safety awareness and education efforts primarily on trades workers, first responders, youth, and the general public.

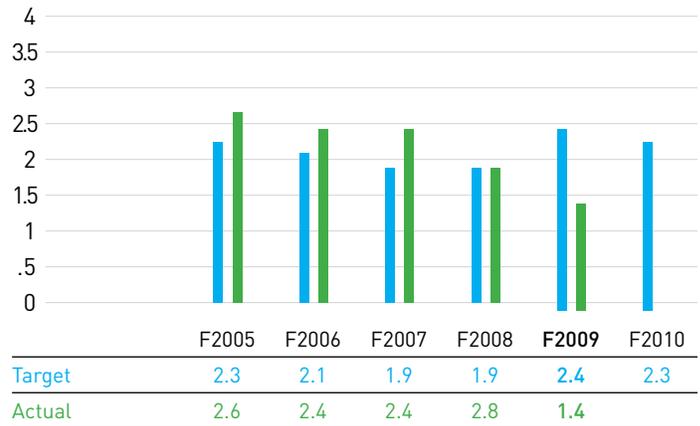
In fiscal 2009, BC Hydro delivered 151 presentations to more than 2,900 trades workers and 52 presentations to over 900 first responder personnel (firefighters, police, paramedics), including 11 'Electrical Safety for Firefighters' train-the-trainer workshops. The enhanced electrical safety materials will be delivered by fire training officers to firefighters as part of their core safety training. For information on our safety education programs see page 45.

TECHNOLOGY

Using advanced technology to help us create a safer work environment, achieve our conservation and environmental goals and improve our systems performance is also a focus of BC Hydro. An example is the BC Hydro Robotic Pole Manipulator. An initial Live Line Automation investigation of our work on overhead power lines was conducted in fiscal 2008 and produced recommendations for line worker safety and ergonomic improvements. In addition to direct benefits, there is a compelling argument to be made that the safety benefits achieved through improving ergonomics extend to broadening the available labour pool. For example, current power line technician work methods and tools exclude 50 per cent of male and 90 per cent of female applicants given the physical requirements of the job. The Robotic Pole Manipulator is targeting a reduction in injuries from pulling, hoisting and lifting, which account for the highest percentage of injuries at 18%. The goal of the project is to remove workers from handling the pole altogether, which also reduces the chance of a more severe injury.

ALL INJURY FREQUENCY

Number of injuries per 200,000 hours worked
lower is better



All Injury Frequency (AIF) is also a standard CEA measure and is defined as the total number of employee Medical Treatment and Lost Time Injuries occurring in the last 12 months per 200,000 hours worked. Medical Treatment Injuries are those where a medical practitioner has rendered services beyond the level defined as "first aid" and the employee was not absent from work after the day of the injury.

Both AIF and Severity metrics, as defined in the CEA Standard, are generally harmonized with the U.S. Occupational Safety and Health Administration Standards for safety statistics.

PEOPLE



GUIDING PRINCIPLE:

To be the top employer for generations and to use exceptional teamwork to engage all employees.

Lyle Viereck, Director of Aboriginal Relations and Negotiations, holding the Seeds of Empathy baby, at BC Hydro's announcement of its involvement with Roots of Empathy, a not-for-profit organization dedicated to teaching emotional capacity and empathy in children.

Like other employers faced with an aging workforce and a competitive external labour market, we continued to place a high priority on the attraction and retention of employees in fiscal 2009. The global economic slowdown started to ease some of the pressures of the skilled labour shortages we have experienced in previous years. Our rate of attrition also slowed as the year progressed and this facilitated the retention of some of our experienced workers to assist with the mentoring, training and knowledge transfer from their roles to newer employees. However, our retirement eligibility remains a moderate concern with 25 per cent of our current workforce eligible to retire within the next five years.

Over the last five years, we've increased our representation of both women (by 20 per cent) and visible minorities (by 40 per cent) working at BC Hydro. The make up of our workplace is changing and growing younger - just over 40 per cent of our workforce is made up of those born since 1964, with those born since 1981 making up the fastest growing segment of our workforce.

However, with over a third of our workforce having less than two years of service and half with less than five years, our company is undergoing a significant demographic transformation. This has required a balance of leveraging and retaining the skills and experience of our legacy workforce with the effective onboarding, leadership development and job-related training of our newer staff to ensure they have the tools, skills and support to perform well in their roles.

STRATEGIES IN THE 2008/09-2010/11 SERVICE PLAN:

In last year's Service Plan, we stated we would:

- manage need by continuing to improve organization-wide workforce planning and forecasting capability as well as pursue job redesign, skills upgrading and retraining to support the introduction of new technology;
- expand talent by deploying our targeted outreach sourcing strategy and Aboriginal Education and Employment strategy to attract a more diverse workforce and by increasing our focus on international recruiting for hard to fill positions;
- attract talent by hiring early replacements for critical roles to allow for knowledge transfer as well as continuing to leverage our Employee Referral Program;
- grow talent by continuing to strengthen our leadership team through a focus on leadership coaching and development, succession planning and career pathing and by expanding our apprentice and trainee programs; and
- retain talent by delivering consistent and timely employee on boarding and orientation programs, conducting a review of our Total Rewards programs (which includes base pay, variable pay, benefits, pension and other related incentive programs) and further involving our people in "once in a lifetime" opportunities and challenges, including addressing the energy gap and supporting the Vancouver 2010 Olympic and Paralympic Winter Games.

PEOPLE

The following changes have been made to these strategies in this fiscal year: we now attract talent by hiring for critical roles in advance of retirements to facilitate knowledge transfer and we leverage not only the employee referral program but also more extensive employee networks for referrals.

In fiscal 2009, we focussed on a variety of programs and initiatives to source, develop and retain our workforce talent:

- We promoted our employment brand in our internal and external communications and emphasized our focus on diversity, sustainability, and our core values.
- We communicated the value of our compensation and benefits package to existing employees and prepared a three-year implementation plan to refresh our Total Rewards philosophy and strategy.
- We implemented a cost neutral workforce plan initiative for our skilled trades people that will reduce overtime and usage of contractors, provide flexible movement of work between job types and better enable the safe and timely maintenance of our capital infrastructure.
- We launched the Bright Futures outreach program with the Electricity Sector Council to promote career interest in the sector for B.C. high school students and teachers.
- We streamlined business processes in recruitment and performance management and improved web-based access to human resources information.
- We supported employee-led career and skills development workshops and events organized by the BC Hydro Women's Network and the Hydro Employees' Multicultural Society.
- We conducted an enterprise-wide review of our training functions and courses and have developed a new governance and systems strategy. These initiatives will improve the accessibility and effectiveness of our training and development offerings across the company. Training programs offered this year included new programs for our operations trainees, as well as driver safety and procurement training.

VACANCY RATE

Percentage – *lower is better*

	F2007	F2008	F2009	F2010
Target	NR	10.2	9.9	8.0
Actual	9.0	8.7	6.9	
Number of Employees	4,546	5,185	5,844	

Vacancy Rate is a high level indicator of an organization's people management, which includes its reputation and competitiveness as an employer, level of employee engagement, staff turnover and the effectiveness of workforce planning and recruitment processes. The vacancy rate is subject to considerable variation based on factors such as organizational growth, internal personnel movement, employee demographics and external market conditions. As such, it must be interpreted within the context of the timeframe being measured. Vacancy Rate is calculated as a percentage of the number of vacancies in progress (replacement or additional positions actively being recruited internally and externally) to the sum of BC Hydro's headcount plus the number of vacancies in progress (less seasonal roles). The year-end result is calculated by averaging the month end rates at the end of each quarter.

EMPLOYEE ENGAGEMENT

Mean Score (out of five) – *higher is better*

	F2006	F2007	F2008	F2009	F2010
Target	-	N/A	3.50	3.55	3.60
Actual	3.28*	N/A	3.32*	3.61	

*fiscal 2008 and fiscal 2006 actuals adjusted for comparative purposes.

BC Hydro conducts an employee survey on a yearly basis to measure overall engagement levels within our workforce based on questions related to motivation, resources, alignment and capability.

The level of employee engagement is indicative of both employee satisfaction and productivity across the company. The increase in the employee engagement score from 3.32 in fiscal 2008 aligns with the additional focus on having enough people, managing performance well, explaining BC Hydro's decisions and building teamwork across business groups. The number of employees participating in the survey also increased significantly from 66% in fiscal 2008 to 83% this year.

Benchmark Performance - BC Hydro compares its engagement results to those published by WorkCanada for the Energy/Utilities industry sector. BC Hydro's employees had a 10 per cent higher favorable response ratio when compared the WorkCanada Energy/Utilities index on similar questions (BC Hydro 69.5 per cent vs. industry index 59.9 per cent).

ORGANIZATION AND SKILL DEVELOPMENT

This year we focused on refreshing and updating our industry-recognized leadership development programs. In fiscal 2009, nearly 500 employees participated in our leadership programs, bringing the total to close to 2,000 employees since we introduced the first program in 2005.

In the continuous development of our future workforce in critical roles across the company, we maintained our successful trainee programs for Managers and Professionals in Development, Engineers in Training, Graduate Technologists in Training, Managers in Training, as well as our Student Co-op, Apprenticeship and Trades Trainee programs.

PEOPLE

FIRST NATIONS

This was a pivotal year for BC Hydro in its efforts to foster relationships with aboriginal people in B.C. and to build a foundation for sustainable, long-term relationships with our aboriginal partners and neighbours. The BC Court of Appeal provided greater clarity around the role of the BCUC in assessing the adequacy of First Nations consultation. We will continue to work to ensure that the honour of the Crown, including the duty to consult with First Nations, is upheld.

BC Hydro concluded an agreement with the Kwadacha First Nation and initialled an agreement with the Tsay Keh Dene First Nation to address the historic social, economic and environmental impacts that the construction and operation of our Peace region facilities had on their communities.

We underwent an external evaluation of our aboriginal relations initiatives under the Canadian Council for Aboriginal Business (CCAB) and were awarded a Silver designation under their Progressive Aboriginal Relations program. As the first utility company in Canada to participate in this program, this recognition confirms that our strategy to ensure lasting benefits to the aboriginal communities in which we work is effective. For example, we were recognized for our innovative approach to relationship management through the development of Key Account Managers for First Nations communities, similar to the model used with major commercial and industrial customers.

We continue to consult with First Nations to understand and mitigate project impacts, and provide accommodation where appropriate.

BC Hydro continues to build strategic relationships with other organizations to promote aboriginal economic development, wellness, youth sport and leadership. At the Business Council of B.C.'s Corporate Social Responsibility Summit last fall, we shared how our aboriginal relations initiatives were aligned with the company's long-term goals. We announced our partnership with Roots of Empathy, a not-for-profit organization dedicated to teaching emotional capacity and empathy in children, and have committed to support this program in interested aboriginal communities with which we work.

We were honoured to be a founding sponsor of the 2008 North American Indigenous Games and its legacy program to promote aboriginal youth sport in B.C., and a founding sponsor of the B.C. Aboriginal Business Awards, a celebration of the achievements of aboriginal businesses in B.C. We continue to support the Minerva



The BC Hydro Managers and Professionals in Development (MPID) program builds a diverse talent pool of future organizational leaders. The MPID program provides exceptionally talented individuals with two years of rotation experience across the company where they are expected to learn, add value and provide leadership. The MPIDs from 2008/2009 met with Bob Elton, President and CEO, during a training session in Vancouver.



In this photo, a BC Hydro crew installs Power Smart lighting over two Chemainus First Nation soccer fields. This provides bright, safe lighting for community recreation and saves energy by using 54 per cent less energy than the standard lighting used on sports fields. The field is now so popular the First Nation reports they have to do additional maintenance so the field can handle the high demand.

PEOPLE

Foundation's work to empower Aboriginal women and promote cross-cultural communication. Our Aboriginal Procurement Strategy is fully implemented, and provides economic opportunities to aboriginal businesses. BC Hydro also exceeded our annual targets to hire aboriginal employees under our Aboriginal Employment and Education Strategy.

COMMUNITY RELATIONS

Keeping communities informed of our activities is integral to BC Hydro's business. We encourage a two-way communication culture within the communities we serve to ensure that BC Hydro is regarded as a good corporate citizen. We recognize the importance of our interaction with community leaders both individually and collectively. As such, our ongoing support of local government initiatives carries through to the Union of British Columbia Municipalities conference and five other regional municipal conferences held throughout the province each year.

Before we embark on major capital investments in our aging infrastructure or perform system resiliency improvements, we involve those stakeholders and First Nations who may be affected in the decision-making process.

Emergency planning meetings with communities ensure that BC Hydro and local government are prepared prior to emergency situations. In fiscal 2009, we worked with local authorities prior to potential flood situations so that we knew the location of their critical infrastructure, such as pump houses, in the event we needed to turn off electricity for safety considerations.

STAKEHOLDERS

Just as with the communities we serve, BC Hydro continued to engage with a variety of stakeholders in fiscal 2009. We built on several key initiatives including such regulatory topics as the Long Term Acquisitions Plan to ensure our business is sustainable for generations to come.

The Electricity Conservation and Efficiency Advisory Committee (ECE) was established in late 2006. This group of external stakeholders provides input and advice on BC Hydro's conservation and efficiency initiatives.

BC Hydro continued to engage principal stakeholders on rate design processes through the Rates Working Group initiative.

In fiscal 2009, stakeholders from all sectors, in addition to approximately 700 First Nations and Independent Power Producers, participated in 10 information sessions and workshops related to BC Hydro's Calls for Power.

COMMUNITY INVESTMENT

BC Hydro's Community Investment and Outreach department supports, educates and strengthens communities by providing:

- donations and sponsorships to community-based organizations and registered charities,
- scholarships to students who are leaders and role models in their schools and communities, and
- a team of Outreach representatives to develop and deliver programs that encourage B.C. residents to change the way they conserve energy.

Donations and Sponsorships

Community-based, non-profit organizations and registered charities may apply for donations and sponsorships through our online application system. To qualify for funding, projects must support BC Hydro's long-term energy conservation goals and fall into one of four funding areas: environment and sustainability, youth and education, people and leadership, and community initiatives.

We give preference to initiatives that support Power Smart programs, engage and support the Aboriginal Peoples of B.C., and allow for onsite customer education and interaction. Over the past fiscal year, we received more than 1,000 requests for donations or sponsorships, and funded over 550 community-based projects across every region of the province. In total, we invested \$1.2 million in donations and \$1.6 million in sponsorships. We awarded more than \$100,000 in scholarships and endowments to students who are leaders and role models in their schools and communities.

We also support the BC Hydro Employees' Community Services (HYDRECS) Fund, an employee-and-retiree managed fund, and the BC Hydro Power Pioneers Association, a group of over 5,000 BC Hydro retirees who donate their time to local and provincial charities and service clubs.

PEOPLE

CORPORATE/REGIONAL DONATIONS

	F2005	F2006	F2007	F2008	F2009
Amount Allocated (Dollars, in thousands)	1,035	1,005	1,225	1,185	1,185
Percentage Allocation					
Arts and Culture	5	3	0*	0*	0*
Education	14	10	17	15	11
Environment	4	5	6	9	9
United Way	17	14	6	6	1
Aboriginal	8	13	0*	0*	0*
Regional	24	26	39	42	42
Scholarships	13	15	10	7	8
Employees' Community Services Fund	10	10	10	8	9
Community Investment, People and Leadership	7	5	11	13**	20**

Corporate and Regional Donations are monetary grants, sponsorships or in-kind contributions provided by BC Hydro to registered charities or not-for-profit organizations to support cultural, social and economic well-being in communities around the province of British Columbia.

*Arts and Culture, and Aboriginal were considered a separate category in the past, but since fiscal 2007 and going forward, these allocations have been integrated into the main funding areas.

**For fiscal 2008 and fiscal 2009, the People and Leadership funding and Community Investment funding areas are reported together.

The drop in Education between fiscal 2008 and fiscal 2009 is due to moving one donation from Education to People and Leadership.

For fiscal 2009 donation initiatives were planned to have a stronger customer focus that included marketing and leveraging opportunities similar to sponsorships.

Employees' and Retirees' Social Commitment

HYDRECS is an employee- and retiree-managed fund that supports Canadian charities in the health and social services sector. Employees and retirees made donations to approximately 600 charities through the fund. Total contributions made by employees and retirees for fiscal 2009 were \$0.9 million. Additional support for local charities is provided through the organization's Community Growth and Relationship Funds.

Community Outreach

This year marks the tenth anniversary of BC Hydro's Community Outreach efforts, celebrating conservation and providing more than 1,000 career opportunities for representatives throughout the province to date. Community Outreach consists of teams in the Lower Mainland, Vancouver Island, the Interior and Northern B.C. promoting energy conservation with a "Join Team Power Smart" message at each event.

Last year, Outreach representatives attended more than 2,000 community and Power Smart events, more than 2,400 Product Incentive Program (PIP) walk-throughs, and connected with more than 505,000 customers.

Throughout the year, Community Outreach representatives activated 135 BC Hydro sponsorships, 238 Retail events, and attended 330 community events, educating over 290,000 people and earning more than 2,700 media hits through radio remotes, public service announcements and, print and television interviews and stories.



An Outreach representative educates youth in the Okanagan. In the past 10 years, BC Hydro Representatives have attended more than 15,000 events throughout B.C. The program has also changed names – YES team, youth team, Power Smart Outreach, BC Hydro Outreach – but their purpose has always been the same: to be BC Hydro ambassadors in the communities we serve.

RELIABILITY (CUSTOMER)



GUIDING PRINCIPLE:

To have the best in class reliability by customer segment.

The team working on the Whistler venues takes a break at the Whistler Nordic Centre. From left to right: Deepak Ratnam, Will Gemmell, Tom Neary and Larry Cowell.

Customer reliability means the delivery of an uninterrupted supply of electricity to BC Hydro customers. While customers currently report a high level of satisfaction with overall system reliability, as seen in the Customer Satisfaction information on page 33, BC Hydro's actual reliability results did not meet our annual targets. The leading causes for these results are attributed to transmission and substation outages, trees falling onto our power lines and distribution equipment failure. Aging assets, adverse weather due to the nature of where we live and the changing climate, combined with high impact incidents such as the downtown Vancouver cable fire in July 2008 are also key contributing factors to reliability.

Following the winter of fiscal 2007, which was one of the stormiest seasons in B.C. in recent years, BC Hydro has put in place a number of initiatives such as the system resiliency program, customer-based reliability initiative, distribution emergency response continuous improvement plan, and outage communication initiative. These initiatives are intended to strengthen the system to withstand foreign interference, improve reliability at the circuit level for specific customer segment, reduce outage restoration time, and provide timely, accurate outage information to customers. An assessment of overall improvement based on the last three years shows that in a number of communities such as Alert Bay, Campbell River and Lake Cowichan on Vancouver Island, and Powell River, Sunshine Coast and Vancouver in the Lower Mainland, reliability in terms of outage frequency and/or duration has improved in fiscal 2009 relative to the previous two years. As well, successes have included visits to over 40 communities most adversely affected by storm events in recent years to provide outage information, communicate critical distribution infrastructure information and gather community input. These meetings have been well received, with positive feedback provided directly at the meetings and indirectly through coverage in the local media, and in the customer satisfaction survey. The impacts of these infrastructure improvements will continue to be felt in the years to come.

STRATEGIES IN THE 2008/09-2010/11 SERVICE PLAN:

In last year's Service Plan, we stated we would:

- build awareness and understanding – within BC Hydro and in the community – of what our customers need and expect, and the importance of notifying our customers quickly about outages and safety risks, as well as when their power might be restored;
- develop the Storm Resiliency Program to strengthen those circuits that are most susceptible to storms;
- assess and invest in circuits with poor reliability, where either the frequency or duration of outages exceeds a reasonable minimum level of performance to reduce the number of customers experiencing multiple outages;
- use life-cycle analysis to assess the condition and capability of assets (such as wires, poles and cables) and identify opportunities to deliver more reliable service; and
- continue to deliver the Smart Metering Infrastructure Project.

RELIABILITY (CUSTOMER)

RELIABILITY AND STORMS

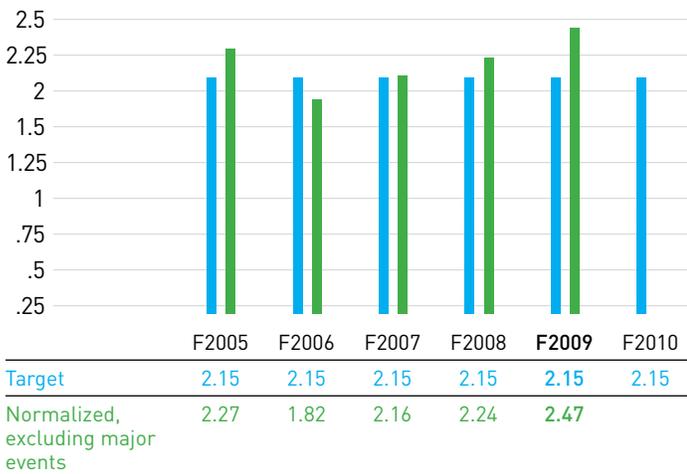
BC Hydro's vast service territory, predominantly overhead distribution system, as well as the province's terrain, weather and vegetation, significantly affects our ability to cost-effectively achieve higher overall levels of reliability.

In fiscal 2009, BC Hydro experienced more widespread outages caused by transmission and substation issues than in previous years. These outages impacted larger numbers of customers and our ability to restore service was hindered by the difficult terrain in which our crews had to work.

Inclement weather such as snowstorms and windstorms also pose significant challenges to BC Hydro's distribution system because they can adversely disrupt our ability to deliver electricity to our customers. However, compared to the last two years, fiscal 2009 has been a relatively mild year for storm activities. The exception was in December 2008 when a series of wind and snowstorms swept across the Lower Mainland and Vancouver Island, interrupting power supply to approximately 260,000 customers, resulting in 1.2 million lost customer hours.

CAIDI (hours)

lower is better



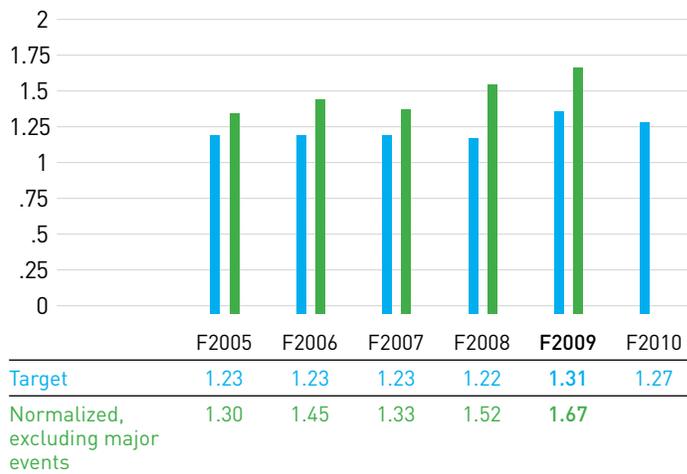
CAIDI is the average interruption in hours per interrupted customer.

BC Hydro's targets are set against normalized results which exclude major uncontrollable events as noted below. Normalized CAIDI is worse than Plan due to longer-than-planned outage restoration time. Adverse weather, trees falling onto power lines and distribution equipment failure are the major contributing factors for the unfavourable performance.

Major uncontrollable events (i.e. windstorms, earthquakes, forest fires) are not included if they cause an outage that results in more than 70,000 lost customer hours or more than one per cent of annual lost customer hours in the distribution system. While major uncontrollable events are not included in the numbers above, controllable causes are included. These include equipment failure or human error at the distribution, substation or transmission level, even if the resulting lost hours are in excess of one per cent of the annual customer hours.

SAIFI (frequency)

lower is better



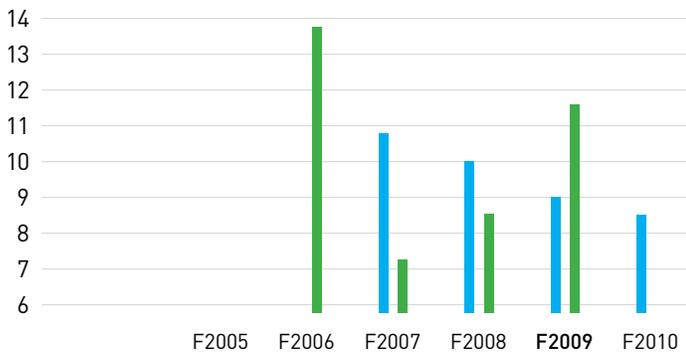
SAIFI is a measure of how many sustained interruptions an average customer will experience over the course of a year.

Normalized SAIFI is worse than Plan as normalized customer interruptions are more than 20 per cent higher than Plan. Higher-than-expected outage frequency due to transmission and substation outages, adverse weather and trees growing or falling onto power lines are the leading causes of the unfavourable SAIFI performance.

RELIABILITY (CUSTOMER)

CEMI-4 (percentage)

lower is better



	F2005	F2006	F2007	F2008	F2009	F2010
Target	N/A	N/A	11.0	10.0	9.0	8.5
Normalized, excluding major events	N/A	13.7	7.3	8.6	11.6	8.5

CEMI-4 is the percentage of customers experiencing four or more outages during a given time period.

CEMI-4 is a customer-focused reliability measure implemented in fiscal 2007 to provide customers with an intuitive understanding of BC Hydro's reliability performance. Fiscal 2009 year-end CEMI-4 is worse than Plan due to increased outage frequency primarily caused by transmission and substation outages, adverse weather and trees. At year-end CEMI-4 was 11.6 per cent, meaning that 208,200 customers have had four or more outages in a year.

BC Hydro participates in an annual Transmission and Distribution Benchmarking Study conducted by First Quartile Consulting. In fiscal 2009, BC Hydro's reliability performance (CAIDI and SAIFI including major events) ranked in the third quartile relative to leading Canadian and U.S. utilities participating in the study.

CUSTOMER GROWTH

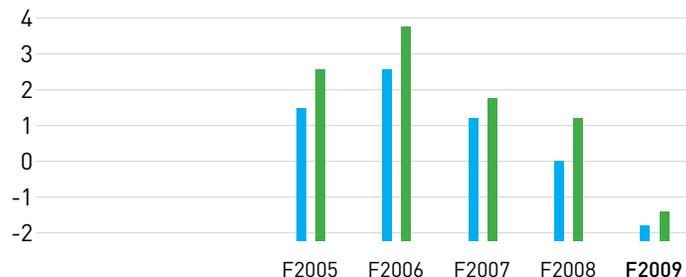
Even with the economic downturn in the second half of fiscal 2009, BC Hydro experienced steady customer growth. Approximately 34,000 new accounts were added in fiscal 2009, compared to about 30,000 a year earlier.

In early fiscal 2009, the North and South Interior saw significant growth. Municipal work continues to drive growth in the South Interior. On Vancouver Island, growth was primarily driven by retirement and resort communities and vacation homes. In Vancouver, despite reduced housing starts, growth continued but developers and investors did place a number of construction projects on hold, which will be reflected in the results for fiscal 2010. Lastly, major infrastructure projects such as the 2010 Olympic and Paralympic Winter Games, Canada Line and major highway improvements continued to contribute to growth in the Lower Mainland.

SYSTEM RELIABILITY IMPROVEMENTS

In order to improve upon our reliability, BC Hydro implemented the System Resiliency Program. Currently in its second year of implementation, system resiliency is a five-year capital investment program in response to the extreme storm season in fiscal 2007 which resulted in an unprecedented level of power interruptions to our customers. Its purpose is to increase the ability of the distribution system to withstand or avoid events like

DEMAND GROWTH (With and Without Demand-Side Management) Percentage



	F2005	F2006	F2007	F2008	F2009
Growth Rate with DSM	1.6%	2.7%	1.3%	0.3%	-1.8%
Growth Rate without DSM	2.7%	3.9%	1.9%	1.3%	-1.3%

The growth rate is calculated as the year-over-year change in domestic load. However, despite higher customer numbers, overall load decreased due to the economic impact on BC Hydro's industrial customers. Slower growth in the residential and commercial sector, and the negative growth rate in the industrial sector, added up to a decline in total BC Hydro firm sales in fiscal 2009 relative to fiscal 2008.

Results for Demand Growth without DSM, published in prior year reports, may differ due to changes in BC Hydro's historical annual acquired energy savings.

RELIABILITY (CUSTOMER)

adverse weather and trees falling onto the power lines. It should also help to minimize the impact of interruptions by building flexibility into the system to re-route power and reduce outage restoration times.

Overall design and construction work on capital projects scheduled for completion in fiscal 2009 is 95 per cent complete at year-end with expenditures of \$23.2 million. Projects spanned communities across North and South Vancouver Island, Lower Mainland, Fraser Valley, Okanagan, Thompson/Shuswap, Prince George, Dawson Creek, Williams Lake, and Fort Nelson.

In the vegetation management area, 100 per cent of the annual vegetation work plan on 83 targeted circuits has been completed as of March 31, 2009 with actual expenditures of \$4.2 million. Key communities where vegetation management work was completed include: White Rock/Tsawwassen, Mission, Whonnock, and Richmond to Chilliwack, as well as others in the Whistler area and on Vancouver Island.



A Certified Utility Arborist preparing a grand fir for removal under the System Resiliency Hazard Tree Program. Photo credit: Jeff Labelle, Vegetation Planning Manager.

GRID MODERNIZATION

Over the past year, there has been an increasing acknowledgement of the need to modernize power delivery systems worldwide. BC Hydro is also considering a variety of technological options and system advancements to increase our system's reliability, encourage energy conservation and improve our safety performance. One of the components of grid modernization is smart metering and the infrastructure attached to it.

Grid modernization will incorporate advanced automation in control and monitoring equipment, information technology and communications to improve grid performance and support an array of services for customers, such as faster outage restoration. In fiscal 2009, BC Hydro developed a Smart Grid framework to support a common understanding of the Smart Grid among utilities, and we are using it to guide our vision of the modern grid.

The Smart Metering & Infrastructure (SMI) Program will provide the foundation to automate, modernize and upgrade our electricity grid. It will support fundamental changes to electricity delivery and usage, making the right information and tools available to help customers manage their own electricity consumption and make more energy efficient choices. The SMI Program provides direct benefits to BC Hydro customers in the near term and lays the infrastructure to support future distribution system applications and technologies, including distributed generation and preparing for plug-in vehicles.

In fiscal 2009, a process was undertaken to explore the technologies and suppliers in the marketplace and gather market intelligence about other smart metering projects in North America and Europe. From this work, the Smart Metering & Infrastructure Program was further refined into four integrated projects. In aggregate, the projects have a positive net present value and will be submitted to the BCUC for review and approval. The four integrated projects are:

1. The Smart Metering Project (*estimate \$480-530 million*) is the installation of approximately 1.8 million digital meters with two-way communications capability to BC Hydro customers.
2. The In-Home Display Project (*estimate \$70-100 million*) will make in-home displays available to customers. These displays provide information on electricity use that can help with in-home conservation.
3. The Theft Detection & Deterrence Project (*estimate \$100-170 million*) is the installation of specialized metering devices to accurately measure electricity delivered to identify and eliminate theft and minimize the subsequent impact on ratepayers.
4. Grid Modernization and Infrastructure Upgrades (*estimate \$80-130 million*) are a series of initiatives that improve the efficiency of our system and build the foundation for the Smart Grid of the future.

RELIABILITY (CUSTOMER)

REMOTE COMMUNITY ELECTRIFICATION

In fiscal 2009, BC Hydro's Remote Community Electrification program, which provides remote B.C. communities with the opportunity to receive reliable and sustainable electrical services, moved forward with several initiatives. We continue to work with a number of First Nations communities to build lasting relationships and determine collaborative energy solutions that work for their communities. Wuikinuxv is one example where BC Hydro provided operations support, ensuring the community had a second winter without a serious power failure. The program also provided operations support to Port Douglas and Tipella where the two communities combined experienced only two hours of total outages in the last year.

BC Hydro also began implementing the "Power Smart for Remote Communities" and "Emerging Alternative Energy" programs. These two programs continue to help BC Hydro pursue alternatives to reduce the amount of diesel used in remote communities, a policy action in the BC Energy Plan. This year, working with the Ministry of Energy, Mines and Petroleum Resources (MEMPR), we have taken energy saving kits to the communities of Uchucklesaht, Hesquiaht, Samahquam, Skatin, Port Douglas and Tipella.

BC HYDRO'S INVOLVEMENT IN THE VANCOUVER 2010 OLYMPIC AND PARALYMPIC GAMES

As an official supporter of the Vancouver 2010 Olympic and Paralympic Winter Games, BC Hydro will provide clean power for the events, and leave behind an infrastructure legacy that will benefit British Columbians. This includes building the electrical infrastructure and providing operational support for the venues. We are also leveraging our official supporter status to benefit employee engagement and energy conservation.

The electrical infrastructure and operational support planning for 17 mountain and city venues are on schedule with nine of the venues connected and the remainder targeted to be completed by summer 2009. In addition, both internal and external sponsorship activation activities, the Outreach "Power the Games: Save Like a Champion" Tour and Team Power Smart incentive programs, are underway.

BC Hydro is also lucky to have a Winter Paralympian as an employee. Lauren Woolstencroft is an engineer working on the Olympic venues. She is also a member of Team Power Smart and is helping us to spread the conservation message.

BENCHMARKING AND CUSTOMER RELIABILITY

BC Hydro participates annually in several benchmarking studies with leading Canadian and U.S. utilities to compare our performance relative to other utilities, to analyze drivers of superior performance and to identify best practices and opportunities for continuous improvement. The studies have shown that notwithstanding our service territory being significantly larger than other utilities surveyed, we are one of the lowest cost service providers and have many of the industry's best practices in place.

In particular, our distribution wires business has been consistently ranked among the best in terms of distribution expenditures per customer, a relevant benchmark for distribution efficiency. However, our reliability performance does not compare favourably with the panel of North American utilities due to our vast and largely rural service territory, predominantly overhead system, and vegetation challenges.

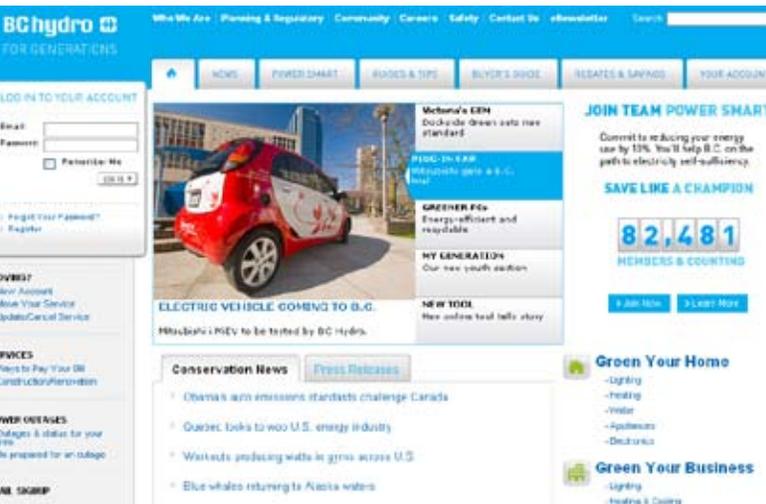
The Power the Games: Save like a Champion Tour will be travelling across the province attending community events in fiscal 2010. The Conservation Lab, seen here, will be at many of these events. Planning for the tour, the largest ever for BC Hydro's Community Outreach teams, occurred in fiscal 2009.



BC Hydro has three times as many trees per overhead pole mile as the North American average. Since approximately 85 per cent of our distribution system is overhead (more than almost all the utilities surveyed), the system is much more susceptible to major weather events and the attendant tree-related problems.

In summary, considering the challenges inherent in our operating environment, BC Hydro is able to provide an acceptable level of reliable service to the customers while maintaining its position as a low cost service provider.

CUSTOMER SATISFACTION



GUIDING PRINCIPLE:

To lead by offering extraordinary value and service.

With a vision to be the energy conservation resource for British Columbians, BC Hydro transformed bchydro.com just in time for Power Smart Month in 2008. The site provides a better customer experience including a stronger focus on energy conservation content, a fresh new look, and improved access to information and tools designed to foster and enable energy conservation behaviour. Over 75 employees worked on the new site in a project led by our Digital Communications group.

Reliable power and customer service continue to be noted as key strengths for customer satisfaction with BC Hydro. Throughout fiscal 2009, BC Hydro continued to build upon our understanding of our customers' wants, needs and expectations to best support key corporate initiatives as well as to meet our Customer Satisfaction and Energy Conservation goals. Workshops and training sessions were delivered on conservation, rates, bill management and outage processes to a variety of customer groups and community stakeholders including the low income segment and small and medium business groups. BC Hydro launched the newly designed external website in September 2008 and BC Hydro's call centre had over 37,000 conservation-focused customer interactions relating to all aspects of energy efficiency and conservation.

STRATEGIES IN THE 2008/09 TO 2010/11 SERVICE PLAN:

In last year's Service Plan, we stated we would focus on:

- improving service in high customer contact areas by improving outage communication, contact centre interactions, BC Hydro website content and functionality, customer issues resolution and claims processes and customer understanding of electricity and the services BC Hydro provides;
- building our understanding of customers through research, sophisticated segmentation and feedback mechanisms, best practice reviews and benchmarking;
- promoting Power Smart programs to assist customers in reducing their energy costs;
- ensuring employees understand the customer experience and how their actions create optimal customer value and satisfaction;
- developing a Customer Experience Framework; and
- closely managing change with our customers through clear, targeted communications, well-planned implementation, and excellence in our customer service operations.

In fiscal 2010, outage communications will transition from initiative-based programs to become embedded into day-to-day service delivery and link to our continued commitment and focus on communication and customer engagement.

CUSTOMER SATISFACTION

CUSTOMER SATISFACTION RESULTS

BC Hydro achieved a 90 per cent overall customer satisfaction rating in fiscal 2009, exceeding our target of 80 per cent. Satisfaction was highest among key accounts at 92 per cent, followed by small/medium business at 89 per cent and residential at 88 per cent. Strong customer satisfaction results are attributable to a number of factors, including increased focus on communication and customer engagement with respect to conservation, outage management, and improvements in call centre service.

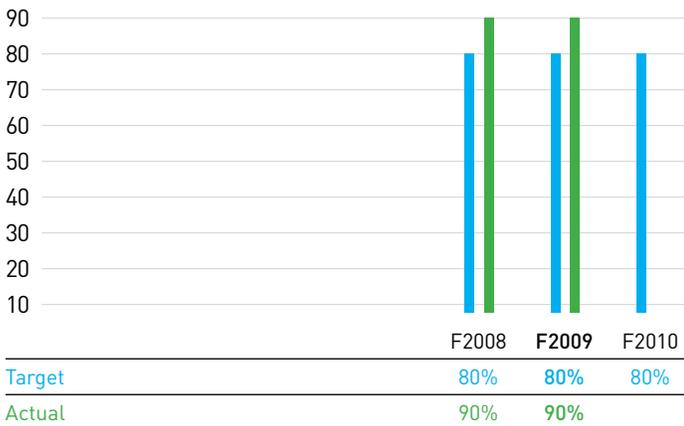
Customer satisfaction ratings are based on the percentage of customers who indicate they are “very satisfied” or “satisfied” with BC Hydro on a four-point scale across an equally weighted index of five key drivers:

- providing reliable electricity;
- providing value for money;
- demonstrating a commitment to customer service;
- acting in the best interest of British Columbians; and
- demonstrating efforts to communicate with customers and communities.

“I would really like to thank the hard-working outdoor and indoor people who worked to restore the power in the last few days. We were out three times in one day and waited only up to two hours to get going again. Thanks everybody for being stalwart and professional.” — www.bchydro.com – Voice of our Customers May 2009

CUSTOMER SATISFACTION

percentage – higher is better



Customer satisfaction ratings are based on a percentage of customers who indicate they are “very satisfied” or “satisfied” with BC Hydro on a four-point scale across an equally weighted index of five key drivers. Customers are divided into three segments: residential, small/medium business and key accounts. All three segments are equally weighted and reported as a four-quarter rolling average using a continuous surveying methodology.

BILLING ACCURACY

higher is better

	F2006	F2007	F2008	F2009	F2010
Target	N/A	N/A	98.2%	98.2%	98.2%
Actual	N/A	98.5%	98.5%	98.5%	

Billing Accuracy is the percentage of invoices that are accurately calculated based on the customer’s consumption and do not require adjustment or rebilling. Billing Accuracy remains stable and above target for fiscal 2009.

FIRST CALL RESOLUTION

higher is better

	F2006	F2007	F2008	F2009	F2010
Target	N/A	N/A	N/A	66%	66%
Actual	N/A	N/A	71%	75%	

First Call Resolution is the percentage of customer calls that are resolved during the first contact with a call centre agent, without the need for additional investigation or follow-up. First Call Resolution continues to remain stable and above target.

CUSTOMER SATISFACTION

OUTAGE COMMUNICATION

Informing customers about outage preparedness is crucial to responsible utility practice and, in the past year, we have promoted storm outage preparedness using various communication channels including televised public service announcements, print advertisements in community newspapers, bill inserts, and through our Outreach teams at community events. In addition, our field employees, once on site and after assessing the situation, have continued to make reviewing the reasonability of and updating the Estimated Time of Restoration (ETR) a priority, and thereby have improved the accuracy of our ETR times significantly. Another component of outage communications involves our stakeholders. In fiscal 2009, a secure web interface was created to allow for two-way electronic communications with the Emergency Services community around high priority incidents involving our equipment. In fiscal 2010, outage communications will transition from initiative based programs to become embedded into day-to-day service delivery and link to our continued commitment and focus on communication and customer engagement.



Ever since veteran Abbotsford lineman Walter Shwydky began arriving at outage scenes, he's been going through an outage checklist in his mind: assessing the cause of the outage, the safety of the scene and the staffing required to restore power. But in the last two years, he's added another major item to the list: calling in to update the estimated time of restoration (ETR). He knows that this small action will allow customers to make important decisions, from letting the children out of school for the day to getting a hotel for the night. As a result of efforts like Walter's, BC Hydro's ETR's have improved significantly in this past fiscal year.

RELIABILITY (SUPPLY)



GUIDING PRINCIPLE:

We will provide electricity self-sufficiency (energy and capacity) in B.C. to meet all domestic needs.

Shawna McMillan, Engineer in Training, standing on the Mica Dam in May 2008. Photo credit: Glenn Erho, Engineering Technologist Project Specialist.

Reliability of supply is achieved by ensuring system operations are managed appropriately, maximizing unit availability and minimizing the number of outages during the winter peak period, reinvesting in generating assets, and incrementally supplying through power acquisitions and Resource Smart projects. These steps are having an impact and we are closing the gap between supply and demand in British Columbia.

Ensuring that we have the supply to meet load is a core focus for BC Hydro. When Revelstoke Unit 5 is completed, BC Hydro will have adequate capacity to meet threshold reliability requirements over the winter peak period. Until then, we will meet capacity by relying on contingency resources such as contracted Load Curtailment with large customers and imports to meet peak loads. In fiscal 2009, BC Hydro's net consolidated electricity purchases for domestic use were 4,602 GWh. Throughout the year, the reliability of generation also impacts the cost of energy to meet domestic load as well as the income that can be earned from trade.

STRATEGIES IN THE 2008/09 TO 2010/11 SERVICE PLAN:

In last year's Service Plan, we stated we would:

- ensure generation Heritage Assets maintain reliability targets;
- manage our peak load supply reliability by minimizing the amount of unit outages during the winter peak period;
- secure firm market energy (electricity and gas) for domestic peaks;
- expand our load curtailment programs with customers as contingencies for winter capacity supply;
- return the sixth unit at the Burrard Thermal Generating Station to service in 2008; and
- advance various power acquisition processes and initiatives to ensure incremental supply is in place to meet future needs.

RELIABILITY (SUPPLY)

SYSTEM OPERATIONS

To ensure a reliable supply of energy and capacity, BC Hydro closely monitors factors such as weather and snowpack forecasts, reservoir levels, customer loads, market conditions and the availability of Heritage and Independent Power Producers (IPPs) generating units to supply power. These studies form the basis of decisions to prioritize operation of specific generating plants, identify necessary contingency resources and set threshold prices for the purchase or sale of energy.

Water Supply and Reservoir Storage

Generation from BC Hydro's predominantly hydroelectric system is dependent upon precipitation and reservoir storage. Water inflows into our reservoirs were 96 per cent of average for fiscal 2009.

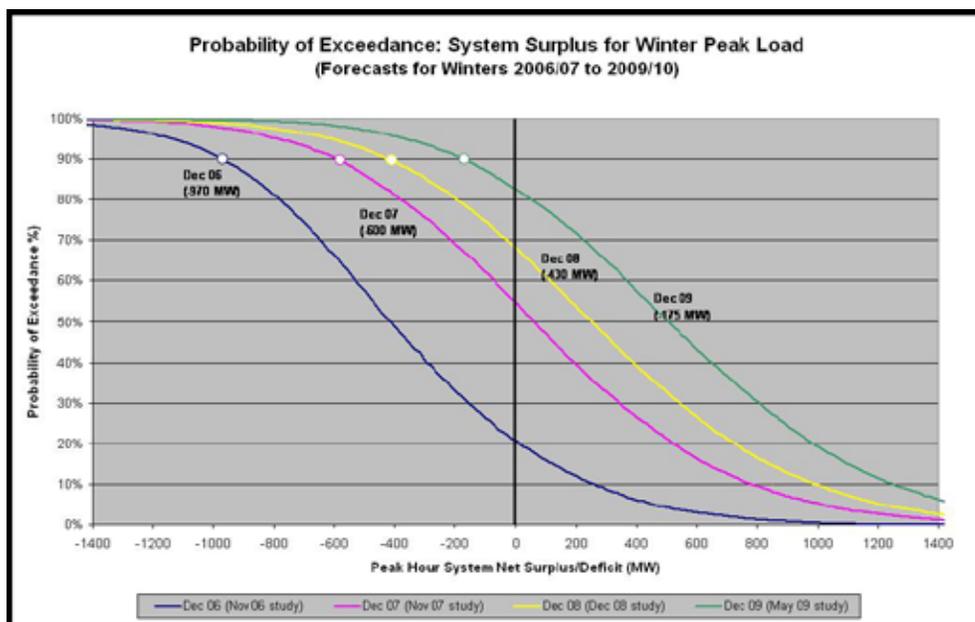
During April 2008, cold temperatures experienced across British Columbia and the Pacific Northwest resulted in a delay in the start of the freshet, or spring runoff. The storage flexibility in our largest reservoirs and energy imports supported system energy requirements during this time. By mid-May the freshet began and low market prices for energy allowed BC Hydro to refill reservoirs at competitive prices.

During the third and fourth quarter, Columbia River Treaty constraints restricted discharge of water at Mica and BC Hydro purchased about 3,000 GWh of energy to meet domestic load requirements.

At the end of fiscal 2009, total reservoir storage was about 1,900 GWh above average and 1,200 GWh (795 GWh after adjustment for non-treaty storage) above the previous year's storage level.

Forecast Supply-Demand Balance for Peak Load

BC Hydro plans to be able to meet the peak load using firm resources with a 90 per cent probability of exceedance. In other words, we should have enough firm resources to meet the peak load nine years out of 10. In other years we will rely on non-firm sources to meet capacity constraints. Peak loads typically occur between November 15 and February 15. As the chart below indicates, in the past we would need to rely on sources such as market purchases in the winter months to supply domestic needs, and were short approximately 400-1000 MW of capacity to meet the forecast peak load.



BC Hydro has reduced its electricity supply risk during the period when customer demand is at its peak. In the past, typically we would need to rely on market purchases and other contingency resources in the winter months to ensure adequate capacity was available to meet forecast peak domestic loads. The chart provides a distribution of probable peak loads for the last three years and for next winter. In previous years, BC Hydro had a forecast capacity deficit of approximately 400 to 1000 MW at the 90th percentile confidence level.

This past winter [2008/09] passed without any major system capacity constraints. The peak load for this past winter (10,011 MW) occurred on Dec 19, 2008. Despite colder than design temperatures, the system load was well below the forecast expected value (10,370 MW) due to the economic downturn. Under these conditions, and running half of Burrard, the system showed a net surplus of approx 260 MW on the peak load hour. Had the actual load been as high as or higher than the design value, the system would have required additional Burrard units or the use of contingency resources.

RELIABILITY (SUPPLY)

Customer Load Curtailment Program

To acquire additional short-term capacity, and provide more options and operating flexibility for meeting customer peak loads, BC Hydro introduced a Customer Load Curtailment Program in 2007. Fiscal 2009 marked the second year of an expanded Load Curtailment Program with our large customers. BC Hydro successfully conducted a load curtailment event on December 15, 2008 during a period of abnormally cold temperatures and consequent high customer demand.

GENERATION AVAILABILITY AND RELIABILITY

In addition to the amount of water in our reservoirs, the availability of our generating facilities contributes to our ability to meet customer demand. Availability reflects the percentage of time a generating unit is in commercial service and available to produce energy. Unit Reliability refers to the frequency that generating equipment encounter unplanned outages.

Winter Generation Availability

The Winter Generation Availability Factor (WGAF) tracks generation availability between the period of November 15 to February 15, when customer demand is most likely to reach its annual peak. Fiscal 2009 WGAF was better than target at 96.4 per cent. This measure was at significant risk due to outages at Kootenay Canal to accommodate BCTC capital work, the GM Shrum Unit 3 outage, and several short duration outages to improve equipment reliability. Several plants achieved 100 per cent availability over the winter period including Peace Canyon, Seven Mile, Bridge River 2, Cheakamus, Clowhom, Stave Falls, Jordan River, Puntledge and La Joie generating stations.

In November 2008, BC Hydro returned the 6th unit at Burrard Thermal Generating Station to service for the first time since 2003. The Burrard facility is a cost-effective source of generating capacity, located close to our largest load centre, and provides additional voltage regulation benefits.

Generation Reliability

Seven key hydro facilities account for approximately 80 per cent of BC Hydro’s generation capacity, and BC Hydro also measures performance through the number of forced outages experienced by each generating unit. In fiscal 2009, key facilities experienced 1.9 outages per generating unit, out-performing the target of 2.2.

A major failure of the GM Shrum Unit 3 turbine in March 2008 resulted in the unit being forced out of service throughout fiscal 2009. Repairs to the turbine and associated components were undertaken on an urgent basis, and the unit was returned to service in May 2009 following an innovative repair solution.



Photo credit: Coleman Mercereau, CPC Technologist Foreman, Northern Operations. GM Shrum Generating Station.

WINTER GENERATION AVAILABILITY

percentage – higher is better

	F2005	F2006	F2007	F2008	F2009	F2010
Target	N/A	N/A	95.8	96.2	96.2	96.3
Actual	95.1	96.8	96.2	94.9	96.4	

This performance measure gauges the reliability of our hydro generation fleet over the critical winter peak period when demand is greatest due to cold weather. Units become unavailable during this time primarily due to unexpected forced outages as well as scheduled outages required to maintain them. This measure drives the need for us to complete all major maintenance in the non-critical period and to minimize outages during the critical peak periods.

RELIABILITY (SUPPLY)

CAPITAL INVESTMENT IN GENERATING ASSETS

BC Hydro is reinvesting in its Heritage generating facilities to improve reliability of supply and provide incremental increases to BC Hydro's energy and capacity supply. BC Hydro's capital expenditure on generation assets has been increasing steadily since fiscal 2001. Capital investment including both Sustaining and Growth capital has grown from \$90 million in fiscal 2001 to \$365 million in fiscal 2009. This will continue over the next five years – and likely beyond – as a number of major projects move into the expenditure-intensive implementation phase. For a list of our current capital projects, see page 123 of the Appendices.

Sustaining Capital

BC Hydro's largest dams and power-generating facilities were constructed in the late 1960s, 1970s and early 1980's, and many smaller facilities have been in operation for even longer. While BC Hydro has maintained these facilities through focused and effective maintenance programs, many assets require major upgrades, refurbishment or replacement to continue to provide British Columbia with reliable electricity.

BC Hydro has developed a Strategic Asset Management Plan, including facility Asset Plans that detail the overall investment strategy for each facility, taking into account the facility role, issues, performance targets, risks and growth opportunities. As a result, in the past few years, BC Hydro has seen an improvement in the health of our assets. BC Hydro employs a life-cycle approach to asset management, designed to maximize the economic return on physical assets over their life, while at the same time managing the risks inherent in owning, managing and operating a large and aging fleet of generation assets.

Resource Smart and Growth Projects

The Resource Smart Program provides additional electricity to the BC Hydro system by upgrading, with generally low or no incremental environmental impact, existing generating facilities. Since its inception in the late 1980s, this program has added almost 1,300 GWh of annual production. In fiscal 2009, the first of three generating units at the redeveloped Aberfeldie Generating Station was placed in service. The new 24 MW facility replaced the 5 MW plant built in 1922. The final two units were placed in service in May 2009. Other active Resource Smart projects include the installation of a fifth generating unit at Revelstoke and the upgrade of the Fort Nelson Generating Station.



Graham Fenwick, Engineering Division Manager and the 2008 winner of The BC Hydro Award of Distinction in Safety, in memory of Don McEwen. "Graham integrates safety into everything he does on the Revelstoke Unit 5 project. His passion for safety inspires and encourages everyone around him to ensure that safety is the highest priority," said Ken McKenzie, BC Hydro project manager, Revelstoke Unit 5, on nominating Graham.

Site C

Site C is a potential third dam and hydroelectric generating station on the Peace River, and is one of several potential resource options being considered to help meet British Columbia's future electricity needs. The BC Energy Plan called for BC Hydro and the Province to consult with First Nations, communities, and the Province of Alberta on the potential project.

BC Hydro is taking a stage-by-stage approach to the evaluation of Site C. Work during Stage 2, Project Definition and Consultation, involved extensive consultation, as well as project engineering, environmental studies and other technical reviews. If built, Site C would provide a clean and renewable source of electricity for more than 100 years. Site C would also have impacts relating to land, roads and bridges, fish, wildlife and community services.

From December 2007 to December 2008, BC Hydro conducted three rounds of public and stakeholder consultation, starting with pre-consultation to determine how people want to be consulted and on what topics. Two rounds of public consultation followed covering a range of environmental and engineering design topics. First Nations consultation is also underway directly with aboriginal groups that may be impacted. In addition, a specific consultation and program was established for property owners in the region. Discussions with the Province of Alberta and Northwest Territories have been led by the Province.

BC Hydro will make a recommendation for government decision in fall 2009 on whether to proceed to Stage 3 of the potential project, which would involve regulatory reviews. BC Hydro will also issue a public report highlighting key findings during Stage 2.

RELIABILITY (SUPPLY)

INDEPENDENT POWER PRODUCERS

BC Hydro's long-term strategy includes buying energy. This electricity procurement plays a critical role in reaching the BC Energy Plan's objective of achieving electricity self sufficiency by 2016, as well as meeting the B.C. Government's policy actions for maintaining competitive rates, clean or renewable electricity and the development of a vibrant and competitive IPP sector.

During fiscal 2009, BC Hydro made considerable progress in advancing three competitive call processes for Independent Power Producers – the Standing Offer Program, Bioenergy Call and Clean Power Call.

Standing Offer Program

The Standing Offer Program was launched in April 2008 following the receipt of regulatory approval. This program offers a fixed energy price and streamlined acquisition process for clean, renewable or high-efficiency cogeneration electricity projects with a capacity greater than 50 kW and up to 10 MW. To date, BC Hydro has received 12 applications under the Standing Offer Program for a total of approximately 220 GWh per year of energy. In February 2009, BC Hydro filed its first executed Electricity Purchase Agreement (EPA) with the BCUC for regulatory acceptance.

Bioenergy Call

The Bioenergy Call is a two-phase call for power to use wood infected by the mountain pine beetle as well as other biomass sources. For the Phase I Request for Proposals (RFP), BC Hydro received proposals for 20 projects from 13 proponents in June 2008. Four EPAs were awarded in November 2008 for 579 GWh/year of firm energy. The awarded contracts had been filed with the BCUC for regulatory acceptance pursuant to section 71 of the *Utilities Commission Act*.

In March 2009, BC Hydro announced the launch of the second phase of the Bioenergy Call. Phase II is being conducted as a two-stream process with the first stream targeting larger-scale biomass projects and the second phase focusing on smaller-scale innovative, community-level energy supply solutions using biomass. BC Hydro expects to receive proposals under both Phase II streams during the fall of 2009 with final project selection targeted to occur in early 2010.

Clean Power Call

The final terms for the Clean Power Call RFP were issued in June 2008. Under the RFP, BC Hydro is targeting to purchase approximately 3,000 GWh per year of clean or renewable energy from larger projects using proven technologies, such as hydro, wind, solar and geothermal energy. In late November 2008, 68 proposals were received from 43 proponents representing over 17,000 GWh/year of firm energy. BC Hydro plans make its Clean Power Call EPA awards in mid-2009 once it receives the BCUC's decision regarding the 2008 Long Term Acquisition Plan (LTAP).

CLIMATE CHANGE, ENERGY CONSERVATION AND EFFICIENCY



GUIDING PRINCIPLE:

We will develop and foster an energy conservation and efficiency culture in B.C. that utilizes technology to lead customers to choose a dramatic and permanent reduction in the use of electricity.

A BC Hydro Hydrogen internal combustion engine truck and hydrogen fuel cell car outside the hydrogen fuelling station at Powertech Labs in Surrey. For more information on our fleet, see the Fleet Vehicle Emissions section.

STRATEGIES IN THE 2008/09 – 2010/11 SERVICE PLAN:

In last year's Service Plan, we stated we would focus on implementing a new 20-year Demand-Side Management (DSM) plan that includes:

- developing and implementing new electricity rate structures;
- supporting the development and adoption of new building codes and standards;
- deploying smart metering to all customers by 2012;
- implementing community strategies such as the Community Challenge, Turn it Off Tour and Power Smart Champions programs;
- developing key partnerships and engaging stakeholders to begin to shift public behaviour;
- stimulating innovation through the advancement of new energy efficiency technologies and practices;
- building the capability of the marketplace to respond to increased demand for energy efficient products and services; and
- increasing the existing portfolio of successful Power Smart programs.

In addition, we will address greenhouse gas emissions by:

- developing an emissions inventory verification and reporting system to meet mandatory reporting requirements and internationally accepted protocols;
- identifying, quantifying, implementing and tracking greenhouse gas (GHG) reduction opportunities to meet Service Plan targets;
- meeting regulatory requirements and pursuing offsets as required; and
- participating in forthcoming regulatory mechanisms resulting from the Province's involvement in the Western Climate Initiative.

For fiscal 2010, this priority has been separated into Energy Conservation and Efficiency, and Climate Change and Environmental Impact.

ENERGY CONSERVATION AND EFFICIENCY

As part of the Long Term Acquisition Plan (LTAP), BC Hydro filed a 20-year demand-side management (DSM) plan with the BCUC in June 2008. This addresses the second of the two critical energy planning targets laid out in the BC Energy Plan: to meet at least 50 per cent of our incremental resource needs through DSM by the year 2020. The LTAP anticipates demand-side management closing approximately three-quarters of the gap between forecast consumption and currently available supply. BC Hydro's demand-side management plan is consistent with recent changes to the *Utilities Commission Act* which establishes the requirement to acquire cost-effective demand side management as a preferred resource.

BC Hydro's traditional approach to DSM has succeeded in driving technological change for energy efficiency. However, to accomplish our vision of developing and fostering a conservation culture in B.C., in fiscal 2009, we have been engaging British Columbians so that efficiency and conservation are a way of life and a way of doing business.



The Conservation Action Team at BC Hydro's Lower Mainland South location in Surrey. Teams such as this one provide grassroots programs and encouragement to employees regarding energy conservation at home and at work. In the photo are Heather Leake, Laura Pearce, Tara Schellenberg, Linda McBride, Deena Staveley, Jerome Dickey, Mike McClure and Bernhard Spalteholz. Missing is Brian Baker.

THE POWER SMART PLAN

The demand-side management plan has a three-pronged approach to energy conservation, anticipating roughly half of the electricity savings coming from Power Smart programs, 30 per cent from government codes and standards and 20 per cent from conservation rate structures. An integral part of the demand-side management plan involves increasing public awareness, providing education and information on energy efficient technologies and conservation actions, engaging communities and municipal leaders to include energy efficiency in their plans and promoting innovative technologies to reduce our electricity consumption.

DEMAND-SIDE MANAGEMENT (DSM)

GWh/Year

	F2008	F2009	F2010
Cumulative GWh/Year since F2008			
Target	295	761	1,700
Actual	326	983	

DSM reflects the cumulative rate of annual electricity savings resulting from DSM activities such as energy conservation and efficiency, and load displacement. Since the inception of the program in fiscal 2002 through fiscal 2007, the program has saved a cumulative total of 2,500 GWh/year; a new start year was commenced in fiscal 2008 to align with targets outlined in the BC Energy Plan. The annual cumulative targets align with the BC Energy Plan's 50 per cent energy conservation and efficiency target, and have been updated to reflect the 2008 Long Term Acquisition Plan targets. This target, in turn, corresponds to a target of 10,000 GWh savings by 2020, which includes additional savings that will be derived from changes to building code standards.

The reported cumulative energy savings for fiscal 2009 includes the energy earned under the 20-year 10,000 GWh/year plan (Power Smart III), starting with fiscal 2008 energy savings. Cumulative March fiscal 2009 energy savings are exceeding target as all three sectors (Industrial, Commercial and Residential) are tracking above targeted levels.

Targets are developed as part of long-term DSM planning which uses the results from a Conservation Potential Review and research related to other DSM tools as benchmarks for achievable savings.

ENERGY CONSERVATION AND EFFICIENCY

CONSERVATION CULTURE

BC Hydro encourages B.C. residents to show their personal leadership by joining Team Power Smart and setting an energy reduction target online through www.bchydro.com or signing up for a free online conservation newsletter. Currently, Team Power Smart has over 70,000 members compared to a plan of approximately 40,000 members. As part of our involvement with the Vancouver 2010 Olympic and Paralympic Winter Games, BC Hydro has issued a challenge to British Columbians for 210,000 people to sign up for Team Power Smart by the time the 2010 Winter Games begin next February.

POWER SMART LEADERSHIP

When BC Hydro established Team Power Smart in 2007, we enlisted a number of high profile business, political, community and sports leaders who have roots in B.C. and share a passion for energy efficiency and conservation to join the team. These leaders continue to be committed to making changes in their own lives that lead to energy conservation and efficiency, with the goal of encouraging British Columbians to participate in conservation activities.

This past year, our Lead by Example program continued to develop BC Hydro's own conservation initiatives for employees and our facilities. From behaviour programs to capital projects to policy direction, we continue to promote energy efficiency and conservation with programs designed to instil a conservation culture both at home and at work. In addition to other facility upgrades, lighting and heating (HVAC) projects were undertaken at several of our generating stations, including Mica and Seven Mile. We have also developed updated energy efficiency and workplace environment standards for any new buildings and refurbishments.

POWER SMART RESIDENTIAL PROGRAMS

BC Hydro continued to offer a range of initiatives targeted to residential customers.

In fiscal 2009, BC Hydro reinvigorated promotions for the Fridge Buy Back program and saw the largest increase in fridge pick ups since fiscal 2005. In excess of 38,000 inefficient second fridges were picked up in fiscal 2009.

BC Hydro also launched a Low Income program in April 2008, beginning with distributing Energy Saving Kits to low income households. With the Low Income Advisory Group of external stakeholders, this program addresses barriers that prevent low income households from participating in demand-side management programs. The kits include energy efficient light bulbs, low flow shower heads and other products to help families save money on their energy costs. Over 9,300 kits were distributed to customers. The next phase of the program will launch in spring 2009 and will include an energy audit and installation of an array of free energy efficient technologies.

"It was nice to get something free for a change. I am a widow on seniors' pension and I have to pinch every penny to keep my house." (Revelstoke, BC. Source: Energy Savings Kit customer comments – Voice of our Customers May 2009)

Finally, last year, BC Hydro incorporated the Renovation Rebate program into the Provincial government's Live Smart program. Visit www.livesmartbc.ca for more information.

POWER SMART BUSINESS PROGRAMS

For industrial, large commercial, government and institutional customers, BC Hydro continues to offer the Power Smart Partner Program. Key components of the Program are energy management assessments, development of strategic energy management plans, energy manager funding and support, energy study funding, project implementation incentives, technology demonstration project funding, workplace conservation awareness, training and educational workshops and seminars, and public and peer recognition.

Power Smart successfully hosted its premier events, the Power Smart Forum and Power Smart Excellence Awards. The Power Smart Forum had record breaking attendance of more than 700 people, an increase of over 100 per cent from 2007.

Commercial

New initiatives were launched in fiscal 2009 including data server virtualization, adaptive street lighting and continuous optimization which helps customers to assess, manage and understand energy usage and impacts within their buildings.

ENERGY CONSERVATION AND EFFICIENCY

For small and medium business (SMB) customers, BC Hydro offers the Product Incentive Program which provides SMBs financial incentives to retrofit existing, inefficient technologies with over 20 different energy-efficient products. BC Hydro expanded the Product Incentive Program by targeting small, hard-to-reach commercial customers. In partnership with the Ministry of Energy, Mines and Petroleum Resources, BC Hydro completed facility walk-through assessments at no cost to SMB customers as well as the installation of pre-rinse spray valves in commercial kitchens.

BC Hydro has partnered with British Columbia Institute of Technology (BCIT) to launch a series of part-time studies courses in Sustainable Energy Management. These courses are designed to support employment opportunities in the emerging field of sustainable energy management, with focus on energy demands of commercial and institutional buildings.

Industrial

For the industrial sector, the Power Smart Partners – Transmission program focused specifically on activities that allow customers to take advantage of the stepped rate structure. The Power Smart Partners – Distribution Program has also been updated to meet the specific needs of industrial customers under the distribution rate.

The new Industrial New Plant Design Program addresses energy efficiency opportunities in new industrial construction in B.C. The outlook for new plant savings opportunities remains positive in water, wastewater and some other sectors, despite the slowdown in several sectors due to the current economic climate.

Local Government and Communities

BC Hydro is continuing to establish itself as a leader in working with community organizations and local municipalities to increase the knowledge and a feeling of responsibility around energy conservation and efficiency.

We initiated several pilot projects, research work and focus groups to help develop our initiatives. Project Porchlight is one example of a local partnership in which BC Hydro partnered with One Change, the Northern Environmental Action Team and EnCana, to distribute CFL bulbs via volunteers in Northern B.C. In addition, our Power Smart Community Network has provided regional reach and has created, implemented, and supported local projects throughout the province. BC Hydro also supported municipalities and developers in implementing community-wide energy strategies as part of their planning process.

CODES AND STANDARDS

In fiscal 2009, BC Hydro worked with federal and provincial government agencies to support and influence new federal product standards that were recently announced and are estimated to save 1,050 GWh by 2020. In addition, we supported provincial regulation of general service lighting, electric water heaters and industrial motors which is targeted for approval in fiscal 2010. BC Hydro played an important role in supporting and influencing the implementation of a new green B.C. Building Code which took effect September 2008 and we were also a key participant in reshaping the next National Energy Code for Buildings to be tabled for discussion in 2010.

TECHNOLOGY

BC Hydro has initiated technology demonstration projects and participated in several studies on emerging technologies and strategic topics. Several technologies were adopted into marketing programs this year, including adaptive street lighting, high flux LED lighting for area lighting retrofits, and lighting for refrigerated cases in grocery stores. New partnerships have been established – we are a participant in the Office of the Future consortium led by California and other U.S. utilities; BC Hydro is working with the University of British Columbia (UBC) and the mining industry to develop a research program to improve energy efficiency in metal mining; and we have been a catalyst to initiate discussion and sharing of information on emerging technologies among some 15 utilities and organizations across North America.

CONSERVATION RATE STRUCTURES

New conservation rate structures are part of BC Hydro's three-pronged approach to conservation. As a result of BC Hydro's residential rate design application, the BCUC approved a two-step inclining block rate structure in August 2008. The new Residential Conservation Rate is designed to encourage conservation among residential customers and became effective on October 1, 2008. BC Hydro is currently in the design stage of a new conservation rate structure for large general service customers and expects to file this new rate structure with the BCUC in fiscal 2010. The BCUC also approved BC Hydro's Transmission Service Rate Re-pricing application to re-price

ENERGY CONSERVATION AND EFFICIENCY

Industrial Tier 2 rates to reflect the average cost of new supply, effective April 1, 2008. The Transmission Service Stepped Rate has been in place since April 2006.

POWER SMART STUDENTS PROGRAM

The Power Smart Schools Program educates B.C. students on the benefits of energy conservation and sustainability. In fiscal 2009, the program reached more than 18,000 students in 48 school districts. The Energy Detectives program, for Kindergarten to Grade 3 students, was translated into French. It features a storybook, *Smarty and the Energy Detectives: The Mysterious Equation*, containing conservation and electrical safety messages and meets Ministry of Education Prescribed Learning Outcomes. In addition over 1,500 students from 35 schools in Fort St John, Prince George, Kamloops, Revelstoke, Courtenay and Langley participated in the Free Spirit Conservation Tour to raise awareness of energy conservation within B.C.

BC Hydro also delivered electrical safety education workshops to Grade 2 and Grade 6 teachers in BC Hydro's service territory. As part of an Electrical Safety for Trades Students pilot program, we also developed and delivered 23 presentations to six post-secondary schools.



Students at Semiahmoo Secondary School in Surrey involved in BC Hydro's Energy Ambassadors program for Grades 10 to 12. In the Energy Ambassadors program, students work in teams to discover how efficiently their schools use energy and to identify opportunities to save energy. The teams then use what they learn to encourage change by delivering workshops to elementary students and by undertaking energy conservation initiatives in their school communities. They also develop recommendations to improve energy efficiency for their School Board of Trustees.

INVENT THE FUTURE

"Invent the future.ca" was developed in 2008 as an evolution to the Off the Grid youth contest held in 2007. Youth between ages 13 to 29 were asked to submit an idea for a sustainable product or lifestyle change that would reduce energy consumption for all of B.C. The idea was to reach an audience interested in sustainability, climate change and energy conservation. Ideas were submitted as either a 30-60 second video or a short essay. This province-wide contest attracted a total of 148 entries. Submissions for the contest can be viewed at www.inventthefuture.ca.



CLIMATE CHANGE AND ENVIRONMENTAL IMPACT

Just as with Safety, BC Hydro recognizes that the operation of the electrical power system can be hazardous and the risks must be actively managed to protect people, property and the environment. BC Hydro is committed to producing, acquiring, delivering and consuming electricity in an environmentally, financially and socially-responsible manner. We recognize that environmental risks are associated with our work and we have a system in place to manage those risks in a consistent and conscientious way.

In fiscal 2009, we made significant progress in three key areas. Fish habitat: our efforts have finally made improvements upstream of the Coquitlam Dam where we saw fish returning to their habitat for the first time in 80 years. Water Use Planning: we continuously take input from stakeholders to ensure that we consider the environment as well the needs of people around our sites. Triple bottom line thinking: we are minimizing our footprint and leaving the environment in a better place than today for future generations by including structured decision making in all of our business cases.

BC Hydro's climate change strategy includes a focus on reducing emissions first and relying on offsets second. BC Hydro expects to purchase GHG offsets to meet new provincial regulatory requirements and potentially to meet new Service Plan emissions targets in advance of regulatory need. Starting in 2010, BC Hydro is required to offset annual emissions from the vehicle fleet, building energy use and paper use by purchasing offsets through the Pacific Carbon Trust to meet the B.C. Carbon Neutral Government Regulation.

ENVIRONMENTAL IMPACT GOAL

To progress towards our goal of 'no net incremental environmental impact', air, land and water metrics were developed and tested at fourteen sites in fiscal 2009. This data will be used in fiscal 2010 and combined with additional information to create a complete set of baseline impacts.

CLIMATE CHANGE

BC Hydro currently supplies electricity at one of the lowest carbon intensities in the world. Concern about greenhouse gas emissions is now a permanent part of utility planning and BC Hydro has developed a climate change strategy that will manage regulatory risk and ensure compliance, reduce greenhouse emissions and prepare for the unavoidable physical impacts of climate change.

The LTAP submitted to the BCUC in June 2008 proposes the lowest carbon intense portfolio BC Hydro has ever identified as being cost-effective, including Power Smart, Resource Smart and clean or renewable energy purchases. In addition, greenhouse gas emission reduction targets have been established for the first time in the 2009/10 to 2011/12 Service Plan.

BC Hydro has been voluntarily reporting annual GHG emissions since 1995 in accordance with international best practices such as the World Resources Institute/World Business Council for Sustainable Development Greenhouse Gas Protocol. We are well-prepared to respond to mandatory reporting requirements anticipated to come into effect as early as 2009.

In the first three months of calendar year 2008, a build up of ice on the Peace River resulted in the inability to run our Peace River facilities and caused us to rely on the Burrard Thermal Generating Station to meet winter load. As a result, direct GHG emissions from electricity generation were higher in 2008 than in 2007. Indirect GHG emissions in 2008 were comparable to 2007.

CLIMATE CHANGE AND ENVIRONMENTAL IMPACT

GREENHOUSE GAS EMISSIONS

SOURCE	GHG EMISSIONS BY CALENDAR YEAR (KT CO ₂ E)				
	2004	2005	2006	2007	2008
Scope 1 Direct Emissions					
Stationary combustion (electricity generation)	454	284	581	293	382
Stationary combustion (space heating)	3	3	3	4	4
Mobile combustion (fleet vehicles)	16	16	16	20	20
Fugitive emissions (SF ₆ releases)	11	9	11	10	10
Total Scope 1 Direct Emissions	483	312	612	326	417
Scope 2 Energy Indirect Emissions					
Stationary combustion (electricity and steam consumed by BC Hydro)	1	1	1	1	1
Total Scope 2 Energy Indirect Emissions	1	1	1	1	1
Scope 3 Other Indirect Emissions					
Stationary combustion (electricity purchased from Independent Power Producers)	967	1,082	765	1,093	1,119
Mobile combustion (business use of personal vehicles)	1	1	1	1	1
Total Scope 3 Other Indirect Emissions	969	1,084	766	1,095	1,121

Notes:

BC Hydro reports greenhouse gas emissions on a calendar year consistent with international best practices, protocols and emerging mandatory reporting requirements.

Greenhouse gas (GHG) emissions are reported in carbon dioxide equivalent metric kilotonnes (kt CO₂e).

GHG emissions are rounded to the nearest integer. Totals may not add up due to rounding.

Direct and energy indirect GHG emissions are reported for facilities that are under BC Hydro's operational control.

GHG emissions associated with the corporate operations of wholly-owned subsidiaries Powerex Corp. and Powertech Labs Inc. are included.

GHG emissions due to electricity imports are not included.

Fugitive SF₆ emissions from equipment under operational control of the BC Transmission Corporation are not included.

In anticipation of meeting carbon neutral government requirements, BC Hydro is accounting for indirect life-cycle emissions associated with the consumption of 8.5" by 11" paper. In calendar year 2008, these emissions were estimated to be 0.2 kt CO₂e.

Direct and indirect emissions cannot be added to arrive at total emissions. For the purpose of target-setting, the BC Hydro Service Plan 2009/10-2011/12 contains two GHG metrics:

"GHG Emissions" include all Scope 1 emissions and Scope 3 emissions from electricity purchased from Independent Power Producers; and

"Carbon Neutral Program Emissions" include emissions from stationary combustion (space heating), mobile combustion (fleet vehicles), stationary combustion (electricity and steam consumed by BC Hydro) and consumption of 8.5" by 11" paper.

Where historical GHG emissions do not match previously reported values, emissions have been recalculated due to changes in inventory scope, improvements in data collection and/or updates to emission factors. For more details, please refer to the fiscal 2009 Global Reporting Initiative tables at www.bchydro.com/about/company_information/reports.html.

In our own operations, we have identified measures to achieve carbon neutrality in corporate operations and have implemented actions including greening the fleet and building changes. Another example, as part of the requirements for the public sector carbon-neutral requirements, BC Hydro has moved to the use of 100 per cent recycled paper. For more information on our Lead by Example programs see page 43.

CLIMATE CHANGE AND ENVIRONMENTAL IMPACT

CLEAN ENERGY TARGET

The BC Energy Plan directs BC Hydro to ensure that clean or renewable electricity generation continues to account for at least 90 per cent of total generation. This year, clean or renewable generation accounted for 94 per cent of BC Hydro's electricity supply. To supplement the power from its heritage assets, BC Hydro acquires clean electricity from IPPs located in B.C. BC Hydro undertook three power call processes in fiscal 2009 to acquire additional sources of clean or renewable electricity, including Phase 1 of the Bioenergy Call for Power, the Clean Power Call and the Standing Offer Program. More information on these calls can be found on page 40.

ENVIRONMENTAL MANAGEMENT

In fiscal 2009, we introduced a more modern Environmental Risk Management and Reporting Framework that provides a consistent structured approach to Environmental Risk Assessment. To analyze risks and identify points where they can be controlled, the framework uses highly visual software to illustrate identified hazards and risk management measures.

Three pilot projects to implement the new Framework were completed in fiscal 2009. The pilots highlighted and communicated the responsibility for risk management to the operations side of our business.

Environmental incidents are communicated and reported internally through the Environmental Incident Reporting (EIR) system, which provides information to manage incidents, identify trends and track actions, and helps us address underlying issues to prevent future incidents. This year we also evaluated the relative risk of environmental consequences using the Environmental Risk Calculator. Of the 257 incidents reported in fiscal 2009, a decrease of seven over the previous year, the majority of incidents had almost no to low environmental consequence. Of the reported incidents, the majority that occurred were due to contaminant releases (eg. oil spills), followed by de-watering and electrical contacts (i.e. bird strikes). There were no reported environmental incidents with a calculated environmental consequence of moderate to high. Low, moderate and high impacts are determined using a relative consequence scale to assess the level of impact at any given moment. For example, the dewatering of a spillway may result in an environmental consequence with relatively low impact one day, but on another day, when a fish run is occurring, may result in an environmental impact of relatively high consequence. Each incident is analysed using a standard set of questions and the level of impact assessed.

Environmental risks, such as the release of hazardous materials into the environment or harm to fish and wildlife habitat, are managed through our Environmental Management System (EMS) by using barriers and controls as a first line of defence to prevent environmental impact, with effective mitigation strategies in place should preventative measures fail. Potential environmental hazards such as the use of lubricating oil at generating stations and the need to manage vegetation in riparian areas are identified, tracked, and managed. We use the EMS every day to apply a consistent, systematic and integrated approach to decision making and work planning.

CLEAN ENERGY

Percentage

	F2008	F2009	F2010
Target	90	90	90
Actual	94	94	

BC Hydro established the Clean Energy measure as a minimum threshold target in accordance with the B.C. Government's requirement that at least 90 per cent of electricity generation in the province should be clean or renewable electricity—i.e., from biogas, biomass, energy recovery generation, geothermal, hydrocarbon, hydro, hydrogen, municipal solid waste, solar, tidal, wave, wind or other potential clean or renewable electricity sources recognized by the B.C. Government. The 90 per cent minimum threshold ensures that we maintain and try to improve upon our current performance.

The fiscal 2009 actual percentages are representative of where the system has been tracking for the previous five years. The Clean or Renewable Energy measure reflects the above average hydro production that was due to higher than normal inflows and net market exports from the system.

CLIMATE CHANGE AND ENVIRONMENTAL IMPACT

FLEET VEHICLE EMISSIONS REDUCTIONS

BC Hydro continues to introduce new vehicle and driver-related initiatives to ensure we will comply with the provincial government's policy on carbon neutrality and the reduction of greenhouse gas emissions.

Our fleet now includes 53 hybrid sedans and 50 hybrid SUVs. We introduced an International diesel-electric hybrid line truck in November 2008. Over 200 fleet vehicles are participating in a biodiesel program in the Lower Mainland and on Vancouver Island. This year, we installed Telematics, a data management system that gathers information about vehicle operations in a non-invasive way, in 100 of our fleet vehicles. It will collect data on vehicle fuel consumption, drive cycles and idling times. The study will sample different vehicle classes as well as each of our operating regions over the next year, to assess the use of our vehicles, how they are being driven and how much fuel is used, in order to make future purchasing and driver education decisions.

We are participating in a vehicle pilot partnership with the provincial government as part of a one year case study on the impacts of Production Plug-In Hybrid Vehicles. This year, we integrated eco-friendly driving tips into our safety-related driving programs for all BC Hydro vehicle operators.

ELECTRIC VEHICLE INFRASTRUCTURE GUIDELINES

As part of our participation in research and development in new technologies, BC Hydro is developing a set of guidelines for the installation of electric vehicle charging infrastructure in B.C. The guidelines are a critical step toward the green transformation of the transportation sector in B.C. and in Canada. We have also converted three hybrid vehicles to plug-in hybrid electric vehicles.



BC Hydro's new hybrid line truck hit the road in style in November 2008. The vehicle was seen sporting the new BC Hydro branding as an official supporter for the Vancouver 2010 Olympic and Paralympic Winter Games when it rolled off the lot at its launch.

CLIMATE CHANGE AND ENVIRONMENTAL IMPACT

RECYCLING AND WASTE MANAGEMENT

The sustainable management of waste and recyclable materials from our business is an important part of our overall strategy to reduce environmental impacts from our operations. In fiscal 2009, the materials handled through the Surrey Materials Management Business Unit Investment Recovery Department included 6,047 tonnes of nonhazardous materials, such as scrap metals, wood and paper, that were diverted from landfills. This is a decrease of 10 per cent from the previous year. A large contributing factor is scrap metal which went from 4,959 tonnes to 3,881 tonnes, partially due to new federal regulations coming into place. The result is a landfill diversion rate of 69 per cent, down from the fiscal 2008 rate of 77 per cent.

MANAGING POLYCHLORINATED BIPHENYLS (PCBS)

A large portion of BC Hydro's electrical equipment (approximately 70 per cent) contains PCB-contaminated oil. BC Hydro is reducing the amount of PCBs in use within the Distribution and Generation Systems on an on-going basis through planned equipment upgrades and replacements with new non-PCB containing units. We have begun to test switchyard equipment for PCB content, as well as phasing out other equipment that contains 50 parts per million or more PCBs to be in compliance with new Federal PCB Regulations by the end of 2025.

In fiscal 2009, BC Hydro completed a four-year testing program aimed at identifying the location of PCB-contaminated padmount transformers. Approximately 1,000 of these transformers were found to have PCBs over regulatory thresholds. A plan has been implemented to replace units that have high levels of PCBs or which are located in sensitive areas, such as near schools and hospitals, by December 31, 2009. Seventy-two of the 135 transformers have been replaced as of March 31, 2009. This action will conform to the PCB phase out requirements of the new Federal PCB Regulations which were enacted in September 2008.

RESOURCES RECOVERED AND SOLID WASTE

	F2005	F2006	F2007	F2008	F2009
Total Resources Recovered (tonnes)	3,934	4,205	4,527	6,816	6,047
Solid Waste to Landfill (estimated tonnes)	1,328	1,355	1,509	2,287	3,081
Landfill Diversion Rate (non-hazardous solid waste) (percentage)	NR	77%	77%	77%	69%

Note: The statistics shown above reflect materials flowing through BC Hydro's Materials Distribution Center in Surrey and do not represent all of BC Hydro's waste disposal and recycling. Waste disposal and recycling at other BC Hydro locations is not tracked at this time.

Total resources recovered decreased in fiscal 2009 in part due to a reduction in scrap metal sent for recycling, the disposal of a large number of toner cartridges in fiscal 2008 and a reduction in the amount of e-resources recovery likely due to a decrease in the quantity of equipment slated for replacement. Recycling of ceramic insulators, woodpoles and cardboard increased in fiscal 2009. The increase in fiscal 2008 is due to a change in the tracking of scrap Poles for recycling that began at the BC Wood Recycling facility, the increase in BC Hydro capital replacement projects, write-offs and the disposal of unusable spare equipment. It is also due to the increased tracking across BC Hydro of materials returning from the field.

The increase in solid waste to landfill is largely due to the disposal of wood waste from B.C. Wood Recycling. The majority of this was from the disposal of pine poles that have no value if milled. Other materials that contributed to this increase were contaminated media (soil, gravel & sandblast material) and regular garbage.

Landfill diversion rate estimates the percentage of total solid (non-hazardous waste) prevented from going to landfill due to reuse, refurbishment or recycling.

CLIMATE CHANGE AND ENVIRONMENTAL IMPACT

MANAGEMENT OF CONTAMINATED SITES

BC Hydro owns a large number of sites, both operating and dormant. Some of these sites have been contaminated as a result of past industrial or operating practices. We continue to investigate these sites, prioritize them based on risk, and implement management strategies that consider triple bottom line principles. In fiscal 2009, an audit confirmed that the management of contaminated sites is in-line with industry norms.

ROCK BAY REMEDIATION PROJECT

The Rock Bay Remediation project is BC Hydro's most complex historic contaminated site, dating from the 1860s. A joint undertaking with Transport Canada to remediate the site, located in Victoria, began in 2004. While the agreements with Transport Canada expired in 2008, technical communications continue. Coal tar-contaminated soil was removed in two stages, as was some residual PCB-contaminated soil. Some of the soil remains in a secure, permitted storage facility on site and will be treated and disposed of in the future as part of ongoing environmental restoration activities for Rock Bay. Applications are in process with the provincial Ministry of Environment to obtain Certificates of Compliance covering BC Hydro property, and testing required for that application is continuing. Efforts are also underway to re-open discussions with Transport Canada regarding ongoing remediation work.

WATER USE PLANNING

The Water Licence Requirements (www.bchydro.com/planning_regulatory/water_use_planning.html) (WLR) Program is responsible for delivering the monitoring studies and physical works contained in the Section 88 orders issued by the Comptroller of Water Rights. BC Hydro began implementing the WLR projects in 2006 with the Coastal and East Kootenay watersheds.

BC Hydro initiated many Columbia WLR projects in fiscal 2009. Monitoring and physical works projects were implemented on Kinbasket, Revelstoke and Arrow reservoirs and the Lower Columbia River. Over 40 of the approximately 115 projects delivered in fiscal 2009 were on the main stem of the Columbia River. The range of projects address issues related to various species of fish including all species of salmon, sturgeon, trout, sculpin, dace, as well as, wildlife, recreation, water quality, industrial operations, archaeology, debris management, and erosion protection.



In July 2008, extra water was released down the Puntledge River on Vancouver Island to assist with the migration and spawning of the summer Chinook salmon. With the extra water released on Wednesdays and Thursdays of each week, the fish were able to avoid the obstacles of the Puntledge Generation Station and move upstream easily into the Comox Lake reservoir.

CLIMATE CHANGE AND ENVIRONMENTAL IMPACT

COMPENSATION AND RESTORATION

In partnership with the BC Ministry of Environment, Fisheries and Oceans Canada, First Nations and community stakeholders, BC Hydro has established compensation programs to mitigate the impacts on fish and wildlife resulting from the construction and operation of our generation facilities.

Fish and Wildlife Compensation Program:

BC Hydro provided \$4.9 million to support 11 fisheries and eight wildlife projects.

Bridge Coastal Fish and Wildlife Restoration Program:

The program invested \$1.5 million in over 23 projects, 15 fish and eight wildlife research and enhancement in southwest B.C.

Peace Williston Fish and Wildlife Compensation Program:

More than \$1.3 million was spent on 17 fish and nine wildlife projects and compensation program delivery to protect and enhance fish and wildlife habitat, populations and resources.

SPECIES AT RISK

Many BC Hydro facilities and operations interact with species and ecosystems at risk. Effectively managing these interactions is an ongoing, company-wide effort. BC Hydro uses various procedures to manage potential interactions with species and ecosystems at risk, such as the following species listed under the federal *Species at Risk Act*: the Columbia White Sturgeon, the Nooksack Dace, the Vancouver Island Marmot, the Woodland Caribou, the Western Screech-Owl, the Northern Leopard Frog and the Great Blue Heron.

Efforts include development and implementation of recovery programs for species at risk; specific site environmental management practices for various activities to avoid and mitigate impacts for species at risk; acquisition of properties to conserve and recover biodiversity in sensitive areas; active involvement in organizations and partnerships such as the Canada Intermountain Joint Venture, the North American Bird Conservation Council and the B.C. Wetland Stewardship Partnership and; membership in federal species at risk policy and regulatory associations.

An example of our work is with the Columbia White Sturgeon. BC Hydro, through its Water Licence Requirements Program, is implementing a 12-year, \$33 million, research and monitoring program towards recovery of Columbia River White Sturgeon in Canada. This program will fill critical knowledge gaps in basic biological information at various life history stages; determine annual levels of natural recruitment in both the mid and lower Columbia River; describe the habitat used at different life stages and determine how this habitat is affected by fluctuating river flows; and develop a conservation aquaculture program to supplement both the mid and lower Columbia River with hatchery produced larvae and juveniles. Results from this long-term research program will provide a framework for evaluating and developing adaptive management strategies for white sturgeon in the Columbia River and elsewhere.

FINANCIAL TARGETS



GUIDING PRINCIPLE:

To maintain the existing position of having costs among the lowest in North America and to deliver 100 per cent of forecast net income on an annual basis.

The Aberfeldie Generating Station is one capital project BC Hydro is undertaking to upgrade its system. In this photo, the team (from left to right on the walkway: Rob Adams, Knight Piesold Ltd., Electrical Mechanical Designer; Jim Horkoff, Construction Manager; Doug Baker, Project Manager; and Marcos Mercado, Safety Officer) celebrates a project milestone, the wet testing of the plant water conveyance system on October 15, 2008. Water flow is approximately 20 cubic meters per second exiting the Environmental By-Pass Facility (EBF) into the tailrace.

The significant economic events in the latter half of the fiscal year have had some impacts on our business. For example, our load forecast was adjusted downwards reflecting reduced economic activity, in particular, with our industrial customers. Other impacts included the increase in credit risk associated with our customers and market risks for energy transactions. To date, our risk management practices such as the load forecast reduction mentioned above have proven to identify, quantify and mitigate these risks as appropriate.

Not all of the impacts however have been negative. We have started to experience a declining rate of employee attrition and increase in the number of applications for externally posted positions - reducing our concerns around talent shortage. We continue to focus on our strategic and operational priorities to be able to deliver on most of the milestones as set out in our Service Plan. While adjusting to immediate events, our long-term strategy and role in providing leadership and being a strong presence in our province remains unchanged.

STRATEGIES IN THE 2008/09 – 2010/11 SERVICE PLAN:

In last year's Service Plan, we stated we would focus on filing our next Revenue Requirements Application with the BCUC. BC Hydro did seek a cumulative general rate increase in order to:

- acquire additional clean and renewable energy as well as higher cost market purchases to meet increasing demand;
- upgrade and expand our infrastructure to ensure the long-term security of our electricity supply;
- meet our obligations for First Nations consultation and implementing agreements;
- continue to maintain and improve BC Hydro's personnel and infrastructure safety; and
- prepare for a shrinking labour pool by investing in hiring and retaining highly qualified employees.

We also stated we would work to:

- manage the short-term cost of energy by optimizing decisions of "buy versus generate";
- optimize the long-term cost of energy by implementing the 2006 Integrated Electricity Plan, and the Long-Term Acquisition Plan, which include conducting future competitive market calls for energy from IPPs in order to get the best price for energy;
- enhance prioritization, execution and reporting of capital spending across BC Hydro while upgrading and maintaining our Heritage Assets;
- implement productivity projects focusing on rationalizing IT systems, procurement and work management processes; and
- implement a new 20-year demand side management plan.

FINANCIAL TARGETS

Over the long-term, these strategies are aimed at sustaining a cost advantage by:

- making good business decisions that enhance productivity;
- delivering an effective capital investment program;
- procuring new supply at a low total cost; and
- optimizing BC Hydro’s balance sheet and cost of capital.

Despite the economic downturn in fiscal 2009 BC Hydro exceeded its net income performance target for the year, with results benefiting from higher energy trading income. We were also able to achieve a return on equity of approximately 12 per cent. However, we did not meet six of the 10 other financial performance and operating efficiency targets due to lower operating income (before regulatory accounts), higher operating costs, and a higher debt to equity ratio. Operating income was impacted by lower domestic margins due to reduced revenues from the large industrial sector as a result of weakness in the forest industry, together with higher costs for energy purchases due to lower than average water inflows during the year. Unplanned outages also contributed to reduced generation levels and resulted in higher than planned maintenance costs in the year. Higher debt levels are the result of significant capital expenditures required as part of our ongoing program to meet load growth requirements and maintain our aging infrastructure.

ENERGY TRADING ACTIVITIES

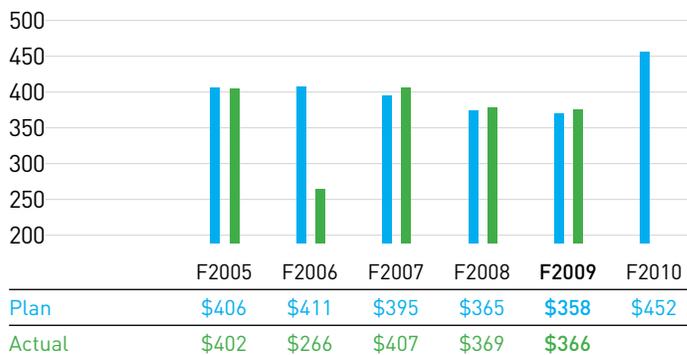
Trade revenues for the year ended March 31, 2009 increased by \$189 million over the previous year due to both electricity and gas activities. Electricity revenues reflect higher sales prices offset by a decrease in gross electricity sales volume of 13 per cent. Electricity sales prices increased as Powerex increased sales in the U.S. Southwest and in Alberta during peak times while a decrease in sales volumes reflected diminishing spreads in U.S. markets in the latter half of the year. Higher gas revenues reflected an increase in gas sales prices of eight per cent as well as a 27 per cent increase in gas sales volumes. The increase in gas sales prices was driven by increased supply concerns in the early part of the year while the increase in volumes reflected Powerex’s strategy to grow its gas business.

REGULATORY

Significant regulatory activity for BC Hydro continued in fiscal 2009. The British Columbia Utilities Commission (BCUC) issued decisions on the fiscal 2009/2010 Revenue Requirements Application and the Residential Inclining Block Rate Application. BC Hydro submitted its 2008 Long Term Acquisition Plan (LTAP) to the BCUC and an oral hearing took place in March 2009. Details of these and other filings are outlined in the following table:

NET INCOME

\$ in millions



Net income is defined as total revenue less total expenses after regulatory account transfers and represents the net impact of key economic and business factors that affect BC Hydro’s performance.

Regulatory account transfers defer to future periods the recognition of costs or revenues that under Generally Accepted Accounting Principles, in the absence of rate regulation, would otherwise be recorded in the current accounting period. The deferred amounts are either recovered from or refunded to ratepayers through BCUC approved rate adjustments in future periods.

For fiscal 2009, BC Hydro’s net income was \$366 million, compared to \$369 million in the previous year. This resulted in a return on equity, based on equity as defined for regulatory purposes, of 11.75 per cent compared with 11.33 per cent for fiscal 2008.

FINANCIAL TARGETS

Application / Filing	Details	Status												
Fiscal 2009/2010 Revenue Requirements Application (RRA)	<p>BC Hydro filed an application in February 2008 requesting rate increases of 6.56 per cent on April 1, 2008, and 8.21 per cent on April 1, 2009. The main cost drivers for these rate increases were the increasing cost of energy purchases to meet domestic needs, the increased level of capital expenditures, and the inflationary and growth pressures on operating costs.</p> <p>The BCUC approved an interim rate increase of 6.56 per cent effective April 1, 2008, and the proposed reduction of the deferral account rate rider from two per cent to 0.5 per cent.</p> <p>A three week oral public hearing was held in October 2008. The application was updated during the hearing to reflect the recent global economic downturn and its impact on BC Hydro's revenues and costs. These changed circumstances resulted in BC Hydro amending its requested rate increases to 3.75 per cent in fiscal 2009 and 10.17 per cent in fiscal 2010.</p> <p>The BCUC issued its decision on March 13, 2009 approving rate increases of 2.34 per cent as of April 1, 2008 and 8.74 per cent as of April 1, 2009. The difference between the 6.56 per cent interim rate increase for fiscal 2009 and the 2.34 per cent increase is to be refunded to customers.</p> <p>The BCUC directed a number of new regulatory accounts be established to deal with the near-term economic uncertainty which will reduce BC Hydro's financial risk in this volatile environment.</p> <p>Even with these new rate increases, BC Hydro's rates would still remain among the lowest in North America.</p>	<p>Following the decision BC Hydro has adjusted its rates as of April 1, 2009 accordingly and is crediting refunds for fiscal 2009 to customers' accounts.</p>												
Residential Inclining Block (RIB) Rate	<p>BC Hydro filed an application in February 2008 for a new rate structure for residential customers. A two-step rate was proposed, with the Step-2 rate price higher for all energy consumption over a certain kWh amount per bimonthly billing period.</p> <p>The BCUC approved the two-step RIB rate effective October 1, 2008 setting the Step 1 threshold at 1,350 kWh and capping the Step 2 rate at BC Hydro's long-run cost of supply.</p> <p>Subsequent to the release of its decision on BC Hydro's fiscal 2009/10 RRA, the BCUC-approved RIB rates for fiscal 2009 and fiscal 2010 are as follows:</p> <table border="1" data-bbox="380 1808 727 1938"> <thead> <tr> <th></th> <th>F2009</th> <th>F2010</th> </tr> </thead> <tbody> <tr> <td>cents/kWh</td> <td></td> <td></td> </tr> <tr> <td>Step 1</td> <td>5.46</td> <td>5.91</td> </tr> <tr> <td>Step 2</td> <td>7.21</td> <td>8.27</td> </tr> </tbody> </table>		F2009	F2010	cents/kWh			Step 1	5.46	5.91	Step 2	7.21	8.27	
	F2009	F2010												
cents/kWh														
Step 1	5.46	5.91												
Step 2	7.21	8.27												

FINANCIAL TARGETS

Application / Filing	Details	Status
Residential Inclining Block (RIB) Rate <i>continued</i>	<p>The Step 2 rate better reflects the long run cost of new energy supply and provides an effective price signal to encourage energy conservation and efficiency. While the rate is designed to be revenue neutral to the residential rate class, individual customers will see bill impacts, which can be mitigated through consumption behaviour changes and participation in BC Hydro's Power Smart programs.</p>	
2008 Long Term Acquisition Plan (LTAP)	<p>The 2008 LTAP application was filed with the BCUC on June 12, 2008. An evidentiary update to the application was filed in December 2008, including an updated forecast of electricity demand. A three week oral hearing was held in February/March 2009.</p> <p>The purpose of the LTAP is to identify sufficient resources to reliably serve the growing demand for electricity service within the BC Hydro service area and to inform and guide BC Hydro's resource acquisition processes over the first 10 years of a 20-year study horizon. The framework for the 2008 LTAP is based on recent changes to the Utilities Commission Act that reflect the government's energy objectives.</p> <p>Key elements of BC Hydro's LTAP requests are:</p> <ul style="list-style-type: none"> • Demand-side management planned expenditures of \$418 million for fiscal 2009 to fiscal 2011; • Pre-attrition target for the Clean Power Call of 3,000 GWh/year; • Burrard reliance for planning of 900 MW of dependable capacity and 3,000 GWh/year of firm energy; and • Approval of the upgrade to the Fort Nelson generation station. 	<p>A decision by the BCUC on this application is expected early this summer.</p>
Standing Offer Program (SOP)	<p>BC Hydro's standing offer program establishes a standing offer for power produced from clean electricity projects up to 10 megawatts, and is in accordance with Policy Action No. 11 of the BC Energy Plan. A negotiated settlement on the terms and conditions of this program was reached with BC Hydro's customer groups and stakeholders and subsequently approved by the BCUC in March 2008.</p> <p>During fiscal 2009, BC Hydro received and applied the SOP rules to 12 applications and signed one SOP Electricity Purchase Agreement.</p>	
Bioenergy Call (Phase I)	<p>BC Hydro issued its Phase I Request for Proposals in late fiscal 2008. After an extensive review process of the 20 proposals received, four Electricity Purchase Agreements (EPAs) were awarded in December 2008 for 579 GWh/year of firm energy and 60 MW of dependable capacity. The awards are consistent with a number of policy actions directed by government in the BC Energy Plan. These EPAs were filed with the BCUC on February 17, 2009 and are currently being reviewed.</p>	

FINANCIAL TARGETS

PROCUREMENT ENHANCEMENT

BC Hydro's Procurement Enhancement program made significant progress with the Procure to Pay project and the Strategic Sourcing initiative in fiscal 2009. New design processes were confirmed and implementation completed with roll-out in April 2009. These processes were introduced to employees who are involved in the initiating, processing, sourcing, receiving or approving of goods and services. In fiscal 2009 the Strategic Sourcing program realized savings of almost \$3 million from contracts that had been put in place to date. Additional contracts have been entered into in the year with anticipated savings of \$25 million over the various contract terms. These contracts were for three-phase distribution transformers; poles; wheel to wheel fuel services; light & medium duty vehicles; and employee relocation services.

APPENDICES

PROGRESS AGAINST SHAREHOLDERS' LETTER OF EXPECTATION

THE SHAREHOLDER'S LETTER OF EXPECTATIONS

The Shareholders' Letter of Expectations describes the relationship between BC Hydro and the Province, and sets out objectives the shareholder wishes BC Hydro to achieve. The Province and BC Hydro review the letter annually and update it as required.

Directions outlined in the letter for which this Annual Report is referring, dated May 2008, focus on accountability, energy conservation, climate change, stakeholder consultation, private sector support, supply options, electricity trading and government relations. The current letter can be found at www.bchydro.com/about/company_information/openness_accountability.html.

OUTLINED BELOW IS HOW BC HYDRO HAS RESPONDED TO EACH OF THE SHAREHOLDERS' EXPECTATIONS:

BC Hydro shall:

Conduct its affairs to achieve its mandate and the performance expectations and objectives of the Shareholder, including establishing plans and implementing corporate strategies, programs, plans and financial outcomes that are consistent with the Shareholder's general direction and consistent with principles of efficiency, effectiveness, and customer service.

BC Hydro Action

Annually, BC Hydro prepares a Service Plan, and Quarterly Reports, which outline our performance in alignment to the expectations laid out by the Shareholder. These can be found under Reports on our website: www.bchydro.com/about/company_information/reports.html.

BC Hydro shall:

Prepare Service Plans with clearly articulated goals, objectives, strategies and performance measures and targets, and Annual Reports that detail progress toward achieving those goals, and post both documents on its website.

BC Hydro Action

www.internal.bchydro.com/about/company_information/reports.html has both the Annual Report and the Service Plan. In addition, the G3 Report, Quarterly Reports and supplemental reports are posted online, as appropriate.

BC Hydro shall:

Display all annual Statement of Financial Information schedules prepared under the *The Financial Information Act* in an easily accessible location on its website.

BC Hydro Action

www.internal.bchydro.com/about/company_information.html. BC Hydro's financial information is released through its Annual Report. These are posted online.

BC Hydro shall:

Conduct its operations and financial activities in a manner consistent with the legislative, regulatory and policy framework established by the Shareholder.

BC Hydro Action

This Annual Report reports on how we have remained consistent with the legislative, regulatory and policy framework established by the Shareholder.

APPENDICES

BC Hydro shall:

Develop and implement strategies to manage risks identified in the Service Plan.

BC Hydro Action

BC Hydro's operations involve a broad spectrum of risks ranging from those commonly associated with any business to catastrophic societal loss risks that would have severe effects on entire regions. The key risks BC Hydro faces are divided into six categories for management purposes: employee, public and dam safety; reliability; financial performance; regulatory; organization risk; and environmental. See Financial Notes for information on our specific areas of risk.

BC Hydro shall:

Comply with the Shareholder's requirements to make the public sector carbon neutral by 2010, including: accurately defining, measuring, reporting on and verifying the greenhouse gas emissions from the Corporation's operations; implementing aggressive measures to reduce those emissions and reporting on these reduction measures and reduction plans; and offsetting any remaining emissions through investments in the Pacific Carbon Trust, which will invest in greenhouse gas reduction projects outside of the Corporation's scope of operations.

BC Hydro Action

BC Hydro currently supplies electricity at one of the lowest carbon intensities in the world. Concern about greenhouse gas emissions is now a permanent part of utility planning and BC Hydro has developed a climate change strategy that will manage regulatory risk and ensure compliance, reduce greenhouse emissions and prepare for the unavoidable physical impacts of climate change. For more information on our strategy see page 46 of the Report on Performance.

BC Hydro shall:

Encourage staff involvement in developing ideas, and new solutions to meet Government's climate change objectives, including energy conservation programs and fleet and traffic management initiatives and report on results achieved.

BC Hydro Action

This past year, our Lead by Example program continued to develop BC Hydro's own conservation initiatives for employees and our facilities. From behaviour programs to capital projects to policy direction, we continue to promote energy efficiency and conservation with programs designed to instil a conservation culture both at home and at work. In addition to other facility upgrades, lighting and heating (HVAC) projects were undertaken at several of our generating stations, including Mica and Seven Mile. We have also developed updated energy efficiency and workplace environment standards for any new buildings and refurbishments.

BC Hydro shall:

Provide the Shareholder with reports and other information that would enable the Shareholder to carry out its responsibilities.

BC Hydro Action

Annually, BC Hydro prepares a Service Plan, Quarterly Reports and the Annual Report, which outline our performance in alignment to the expectations laid out by the Shareholder. These can be found under Reports on our website: www.bchydro.com/about/company_information/reports.html.

BC Hydro shall:

Provide information to the Shareholder if BC Hydro is unable to meet the targets as identified in the Service Plan.

BC Hydro Action

Annually, BC Hydro prepares Quarterly Reports, which outline our performance in alignment to the expectations laid out by the Shareholder. These can be found under Reports on our website: www.bchydro.com/about/company_information/reports.html.

APPENDICES

BC Hydro shall:

Continually review and improve its organization structure to enhance accountability, cost effectiveness and performance.

BC Hydro Action

See page 12 of Corporate Governance to see the latest organization structure and changes that have been made in the last year.

BC Hydro shall:

Aggressively pursue all actions necessary to implement the objectives of the BC Energy Plan; continue to provide Government with a monthly progress report on key initiatives and as a summary of annual progress on environmental leadership, innovation, energy conservation and efficiency, and energy security and self-sufficiency in BC Hydro's Annual Report to the Shareholder.

BC Hydro Action

See the Report on Performance. Climate Change, Electricity Conservation and Efficiency on page 41.

BC Hydro shall:

Proactively provide public information and education regarding the supply of and the demand for electricity and options for meeting future needs in consultation with Government.

BC Hydro Action

See www.bchydro.com.

BC Hydro shall:

Through its subsidiary Powerex, actively pursue extra-provincial energy trading markets and explore and identify opportunities to facilitate access for Independent Power Producers to western North American markets.

BC Hydro Action

Powerex continues its energy marketing and trade activities including buying and supplying wholesale power, natural gas, ancillary services, financial energy products, and, more recently, environmental products with an ever-expanding list of trade partners. These activities help optimize BC Hydro's electric system resources and provide significant economic benefits to British Columbians.

BC Hydro shall:

Advise and consult with the Shareholder in advance of any anticipated or desired BC Hydro initiatives that could have public policy implications.

BC Hydro Action

Ongoing through regular formal and informal updates to the Shareholder.

LEGISLATION AND GOVERNMENT EXPECTATIONS

Legislation

Two key provincial legislative statutes enable BC Hydro's operations: the *Hydro and Power Authority Act*, which established BC Hydro and our general powers and governance and the *Utilities Commission Act*, which created the BC Utilities Commission (BCUC) and established the framework for regulation of public utilities. The BCUC is responsible for ensuring that customers receive safe, reliable and non-discriminatory energy services at fair rates from the utilities it regulates, that shareholders of these utilities are afforded a reasonable opportunity to earn a fair return on their invested capital, and that the competitive interests of B.C. businesses are not frustrated.

BC Hydro's assets also come under the terms of the *BC Hydro Public Power Legacy and Heritage Contract Act*. This act enabled the establishment of the Heritage Contract and ensures public ownership of BC Hydro's Heritage Resources, which includes BC Hydro's transmission and distribution systems, and all of BC Hydro's existing generation and storage assets. The act also includes any future increases to the capacity and energy capability of these facilities.

APPENDICES

Recent Legislation

On November 29, 2007, the B.C. Government passed Bill 44, the *Greenhouse Gas Reduction Targets Act*. The act puts into law British Columbia's target of reducing greenhouse gas (GHG) emissions by at least 33 per cent below 2007 levels by 2020, and by at least 80 per cent below 2007 levels by 2050.

The act requires provincial ministries and agencies, schools, colleges, universities, health authorities and Crown corporations (including BC Hydro) to become carbon neutral by 2010 and to make public a report every year detailing the actions (including changes to facilities, vehicle fleets and procurement, but excluding travel) they have taken towards carbon neutrality.

During 2008, the B.C. Government passed several new pieces of legislation relevant to BC Hydro:

- The *Greenhouse Gas Reductions (Cap and Trade) Act*, which establishes a cap and trade regulatory system, and amendments to the *Greenhouse Gas Reduction Act (Emissions Standards)*, which set into law the BC Energy Plan's requirement for zero net emissions from new and existing (in 2016) electricity projects.
- The *Utilities Commission Amendment Act* received Royal Assent on May 1, 2008. The amendments align the *Utilities Commission Act* with the BC Energy Plan's objectives and require the BCUC to consider, among other objectives, the goals of:
 - > reducing GHG emissions,
 - > pursuing energy conservation and efficiency,
 - > producing and acquiring electricity from clean or renewable resources,
 - > providing technology and information to customers to help them conserve, and implement several other policy actions from the BC Energy Plan.
- The *Carbon Tax Act* came into effect on July 1, 2008. The carbon tax applies to fossil fuels, including gasoline, diesel, natural gas, coal, propane and home heating fuel, and is intended to encourage individuals and businesses to make more environmentally responsible choices, reduce their use of fossil fuels and thus reduce GHG emissions.

The BC Energy Plan

Value for the shareholder extends beyond the financial expectations outlined above to include such other attributes as reputation and delivering on the the BC Energy Plan. Reputational value includes the ability to provide and maintain an acceptable standard of living for British Columbians, and integral to this is providing reliable energy at competitive rates.

On February 27, 2007, the B.C. Government released the BC Energy Plan. The BC Energy Plan provides further clarity on value as it seeks to make the province energy self-sufficient while taking responsibility for our natural environment and climate. These attributes are balanced by the financial expectations which ensure that we focus on operating efficiently and effectively while delivering shareholder value.

The BC Energy Plan looks to all forms of clean alternative energy—as well as energy conservation and efficiency—in meeting the future energy needs of British Columbians.

The plan sets a goal for BC Hydro to acquire 50 per cent of incremental resource needs through energy conservation and efficiency by 2020, while at the same time requiring that:

- all new electricity projects developed in B.C. will have zero net greenhouse gas emissions;
- existing thermal generation power plants will reach zero net greenhouse gas emissions by 2016;
- there will be zero greenhouse gas emissions from coal-fired electricity generation;
- clean or renewable electricity generation will continue to account for at least 90 per cent of total provincial generation, placing the province among the top jurisdictions in the world; and
- the province will be electricity self-sufficient by 2016.

APPENDICES

GUIDING PRINCIPLES

The Guiding Principles, reflecting the following language, are available in BC Hydro's 2009/2010 – 2011/2012 Service Plan.

Reliability (Customer)	To provide best-in-class reliability by customer segment.
Electricity Security (Supply)	To meet all domestic needs.
Remote Community Electrification	To provide appropriate electric service to all remote communities on an equitable basis.
Financial Targets	To maintain low costs for electricity customers in B.C. over the long-term while consistently delivering 100 per cent of forecast net income.
Innovation and Technology	To be an industry leader in innovative use of technology, directly supporting and advancing BC Hydro's long-term goals.
Western Opportunities	To profitably increase Western market share based on access to assets in B.C. and the Western system and increased trading activity.
Environmental Impact	To have no net incremental environmental impact by 2024 when compared with 2004.
Energy Conservation and Efficiency	To develop and foster a conservation culture in B.C. that leads to customers to choose a dramatic and permanent reduction in electricity intensity.
Safety	To provide the safest work environment compared with the best performers in any industry, with none of our employees experiencing a serious safety injury.
Teamwork	To use exceptional teamwork to engage all employees in the achievement of BC Hydro's purpose and long-term goals.
Workplace	To be a top employer for generations.
Customer Satisfaction	To lead other companies in offering extraordinary value and service.
Suppliers	To ensure 100 per cent of suppliers have demonstrated values congruent with those of BC Hydro.
Stakeholder Engagement	To be the most respected company in B.C.
First Nations	To improve relationships built on mutual respect and that appropriately reflect the interests of First Nations.

APPENDICES

CAPITAL PROJECTS

BC Hydro classifies capital expenditures as either sustaining capital or growth capital:

- Sustaining capital is required to meet targeted levels of customer and supply reliability. It includes expenditures to ensure the continued availability and reliability of our generation and distribution facilities. It also includes expenditures to support the business, such as vehicles and information technology.
- Growth capital is required to meet customer load growth and other business investments. It includes expenditures related to the expansion of existing generation assets as well as expansion and reinforcement of our distribution system. The scope and timing of growth projects are uncertain as it is dependent on economic activity and customer demand.

BC Hydro, as the owner of the transmission system operated by the British Columbia Transmission Corporation (BCTC), funds the capital expenditures incurred by the BCTC and includes these costs in our capital expenditures. Transmission capital projects are discussed in the BCTC's Service Plan.

BC Hydro's Guiding Principles and short-term priorities provide the basis to ensure that specific projects are aligned with our overall strategic direction. We then evaluate projects based on their ability to mitigate risk and/or enhance value to BC Hydro's operations. BC Hydro follows both a top-down and a bottom-up approach in our capital planning. This ensures that individual capital plans do not exceed the overall BC Hydro capacity for capital expenditures, and that all the necessary capital expenditures are undertaken to meet performance targets.

BC Hydro uses a staged decision-making process for capital projects to control costs and manage risks. In the Project Identification Phase, we review the alternatives, evaluate feasibility, and develop a preliminary business case to determine whether or not to proceed to the Definition Phase. In the Definition Phase, we fully investigate the selected alternative, complete any regulatory requirements and update the business case. If the business case is approved, we move on to the Implementation Phase where we complete the detailed design, procure equipment, construct and commission the project. Throughout these phases, as more and more information becomes available, the project scope and costs may change significantly. Costs may also change to reflect any changes in inflation rates, the labour market, and construction costs. This cost uncertainty will remain in place until the project is complete, but diminishes as scope is defined and contracts are let. Occasionally, additional information may cause us to defer a project.

APPROVED PROJECTS OVER \$50 MILLION

The following major projects were underway or completed during fiscal 2009.

[Aberfeldie Redevelopment](#)

BC Hydro completed installation of the first generating unit in December 2008. The new 24 MW generating plant replaces the original facility built in 1922. The remaining two units were completed in May 2009.

[Coquitlam Dam Seismic Improvement Project](#)

BC Hydro completed construction of the new dam in July 2008. It meets current seismic standards and reduces risk to people living downstream in the event of an earthquake.

[Gordon M. Shrum Units 1 to 4 Stator Replacements](#)

BC Hydro is replacing four stators at the Gordon M. Shrum (GMS) facility that are at risk of failure and where rewinding the stators is not technically feasible due to the condition of the cores. We began installing the new stators in 2007, and have completed two units as planned. Work on the third unit remains on schedule for completion in fiscal 2010. In May 2008, the BC Hydro Board of Directors approved plans to proceed with replacement of a fourth unit stator.

APPENDICES

Revelstoke Unit 5 Project

BC Hydro is currently installing a fifth generating unit in the plant to provide approximately 500 MW of additional, reliable capacity to meet today's and future demand to the BC Hydro system. The new generating unit will also provide additional energy, operating flexibility and reserves. The Revelstoke Generating Station was designed as a six-unit generation station. However, when the facility was constructed, only four units were installed, leaving two unit bays empty. Construction began in November 2007 and remains on schedule.

Mica Generator Stator Replacement (Units 1-4)

BC Hydro is replacing the stator and rotor poles on each of the four units at the Mica Generating Station to reduce the risk of forced outages due to core bolt failure. We began the work in 2006. We have completed three units as planned; the fourth unit remains on schedule for completion in fiscal 2010.

Peace Canyon Generator Stator Replacement and Rotor Modification

BC Hydro is installing four new stators and modifying existing rotors at the Peace Canyon Generating Station to address design deficiencies, reduce the risk of forced outages and make the plant safer for employees. We have completed three units as planned, and rehabilitation of the fourth unit remains on schedule for completion in fiscal 2010.

Peace Canyon G1 – G4 Turbine Overhaul

In 2006, BC Hydro overhauled Peace Canyon Unit 4 turbine at the same time as the Unit 4 stator was replaced. This overhaul showed that components of the turbine were worn and damaged. As a result, we are overhauling the other three units to prevent further wear that would eventually have affected the reliability of these units. We have completed three units as planned, and rehabilitation of the fourth unit remains on schedule for completion in fiscal 2010.

Cheakamus Spillway Gate Reliability Upgrade

BC Hydro is upgrading the spillway gates at the Cheakamus dam in order to reduce public and employee safety risk and to ensure Flood Discharge Reliability requirements are met. Spillway gates control the amount of water that can be discharged from the reservoir. They are generally used in times of flood to pass high inflows.

Mica Gas Insulated Switchgear Replacement (subject to BCUC approval)

BC Hydro is planning to replace the switchgear system at the Mica Generating Station. The system uses two 500-kilovolt circuits to conduct the energy from the Mica underground powerhouse to the surface, where it transitions to transmission lines. This switchgear is aging and becoming less reliable and is prone to SF₆ (a greenhouse gas) leakage. We released the Gas Insulated Switchgear tender in December 2008, and intend to submit an application for regulatory approval in June 2009.

Fort Nelson Generating Station Upgrade (subject to BCUC approval)

Adequacy of supply is a concern in the Fort Nelson area, and BC Hydro is planning to increase the generating capacity at the Fort Nelson Generating Station. Depending on the upgrade configuration selected, net capacity at the Fort Nelson facility would be increased by either 8.5 MW or 24.5 MW. We are expediting this project for a completion date as early as November 2011.

CONTEMPLATED PROJECTS OVER \$50 MILLION

BC Hydro is contemplating the following projects over \$50 million. These projects are in the early Identification or Definition Phases and final costs are as yet uncertain. We will update interim project cost estimates as we further refine the scope of each project. These projects have not yet been approved by our Board of Directors or Management.

Upper Columbia Capacity Additions at Mica and Revelstoke

We have commenced project definition and have filed Project Descriptions for the construction of Mica Units 5 and 6 with the BC Environmental Assessment Office and the Canadian Environmental Assessment Agency. Each additional unit would provide approximately 500 MW of capacity. No further work is being undertaken on Revelstoke Unit 6 at this time. (Both the Revelstoke and Mica Generating Stations were designed as six-unit generation stations. However, when the facilities were constructed, only four units were installed and two bays were left empty at each station.)

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Hugh Keenleyside and Stave Falls Spillway Gate Reliability Upgrades

BC Hydro is upgrading the spillway gates at the Hugh Keenleyside and Stave Falls dams in order to reduce public and employee safety risk and to ensure Flood Discharge Reliability requirements are met. Spillway gates control the amount of water that can be discharged from the reservoir. They are generally used in times of flood to pass high inflows.

Gordon M. Shrum Units 1 to 5 Turbine Rehabilitation (subject to BCUC approval)

The runners and head covers for Units 1 to 5 have experienced cracking problems since the units went into service in the late 1960s, and one unit—Unit 3—experienced a major failure in the spring of 2008. We are planning to replace the runners to reduce the risk of runner failure, decrease maintenance costs and improve operating efficiency, and have released project tender documents to the market.

CONTEMPLATED PROJECTS OVER \$50 MILLION – SCOPE BEING DETERMINED

BC Hydro is contemplating the following additional projects over \$50 million. Work was completed on these projects during fiscal 2009; however, the recommended solution and scope for these projects remain to be determined, and we are not in a position to provide a target completion date or a cost estimate for these projects. We will update interim project cost estimates as we further refine the scope of each project. These projects have not yet been approved by our Board of Directors or Management.

CAMPBELL RIVER IMPROVEMENTS

John Hart Replacement

The aging John Hart facility, in operation since 1947, needs significant capital investment in the powerhouse and penstocks to ensure reliable long-term generation and to mitigate earthquake risk and environmental risk to fish and fish habitat. We are analyzing options to replace or rehabilitate the existing six unit, 126 MW generating station, including an integrated emergency bypass capability to minimize river flow disruption impacts to fish and fish habitat.

Strathcona Seismic and Seepage Issues

Strathcona is the upstream dam on the Campbell River and its reservoir provides the primary storage for the Campbell River system. The Strathcona intake tower, power conduit, spillway piers and the earth fill dam do not meet current seismic standards. BC Hydro is contemplating upgrades to the facility to improve public safety, system reliability and minimize environmental impacts.

RUSKIN DAM SEISMIC AND POWERHOUSE REHABILITATION PROJECTS

Ruskin Dam Safety Improvement

The upper portion of the Ruskin Dam, built in 1930, does not meet current seismic standards. As an interim measure, we lowered the Hayward Lake Reservoir, behind the Ruskin Dam, by approximately two metres and anchored the most critical section of the upper dam. BC Hydro intends to upgrade the right abutment in 2009 to mitigate the public safety risk. Excavation of artefacts from a recently discovered archaeological site is underway, which may delay aspects of the right abutment construction work. BC Hydro will continue to further define the required dam rehabilitation work.

Ruskin Powerhouse Improvements

The existing 1930 Ruskin Generating Station is at the end of its service life and requires significant capital expenditures to continue to operate safely and reliably. BC Hydro is analyzing options to rehabilitate the powerhouse to meet current seismic standards for earthquakes and replace major generating equipment, which is in poor or unsatisfactory condition.

Lajoie Dam Seismic Upgrade

The Lajoie Dam is a rock fill structure completed in 1955. In recent years, annual repairs to the shotcrete surface have been required to control increased leakage as the dam settles. Because the dam does not meet current seismic standards, we are assessing seismic upgrade options to ensure dam and public safety and maintain reliability of supply.

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Alouette Generating Station Redevelopment

The 9 MW Alouette Generating Station has been in operation since 1928. Because of its age and the condition of the facility, including the fact that it does not meet current seismic standards, BC Hydro is contemplating rehabilitating or replacing both the powerhouse and the generating equipment.

Bridge River Units 5 & 6 Generator Upgrades

BC Hydro is considering upgrading two units at Bridge River, including the replacement or refurbishment of the generators and ancillary equipment, to address the condition and known deficiencies of major components. These generators were commissioned almost 50 years ago and have not undergone a major refurbishment since being placed in service.

Cheakamus Generator Upgrades

BC Hydro is considering upgrading the two units at Cheakamus generating station, including the replacement or refurbishment of the generators and ancillary equipment, to address the condition and known deficiencies of major components. These generators were commissioned over 50 years ago.

Fort Nelson Generating Station Expansion

In order to meet growing customer demand in the region, BC Hydro is evaluating options for the expansion of the Fort Nelson Generating facility to further increase generating capacity in the region. Transmission options will also be considered.

Investments in Burrard Thermal Generating Station

BC Hydro will be conducting detailed condition assessments of the Burrard Thermal Generating Station to confirm the investments required to ensure the continued reliable operation of the facility, such as the purchase of critical spare parts and control systems upgrades.

SUBSIDIARIES

Powerex Corp.

Powerex Corp., a wholly-owned subsidiary of BC Hydro, is a key participant in energy markets across North America, buying and supplying wholesale power, natural gas, ancillary services, financial energy products and, more recently, environmental products with an ever-expanding list of trade partners. Established in 1988, its energy marketing and trade activities help optimize BC Hydro's electric system resources and provide significant economic benefits to the people of British Columbia. The Chief Executive Officer reports to the Board of Directors of Powerex Corp., and has a reporting relationship to BC Hydro's Chief Executive Officer. BC Hydro's Chief Executive Officer ensures the Board of BC Hydro is informed of Powerex's key strategies and business activities.

For the past 10 years, Powerex has increasingly purchased electricity from outside the BC Hydro system to support BC Hydro's domestic needs and to meet its own trade commitments. Powerex also markets, on behalf of the Province, the Canadian Entitlement to the Downstream Benefits of the Columbia River Treaty.

The U.S. to Canadian dollar exchange rate and the energy markets in which Powerex trades vary, and therefore income can vary significantly from year to year. Powerex's net income over the last five years has ranged from \$83 to \$259 million.

Powertech Labs Inc.

Powertech Labs, as a wholly-owned subsidiary of BC Hydro, has been providing consulting and testing services to electric utilities, gas companies, automotive manufacturers and others since 1989. Operating as a separate commercial entity, Powertech has combined unique testing capabilities with multidisciplinary, expert technical staff to help clients solve energy related problems. In addition to providing technical services to BC Hydro, Powertech serves a large number of clients in energy-related sectors across North America, Asia, Europe and beyond. Powertech Labs is located on an 11 acre, 21-lab campus in Surrey and has 114.5 employees as of March 31, 2009.

In 2008, a new Board of Directors was appointed which includes Mossadiq Umedaly (Executive Chair), Brenda Eaton and Dr. Nancy Olewiler. The Board directed Powertech's management team to develop a new strategic direction for Powertech that will capitalize on its core capabilities, strong industry client base and emerging market opportunities. The new strategic plan calls for Powertech to become a clean technology company, competing successfully in global markets in order to create value for BC Hydro and British Columbia.

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Powertech's operating income was \$0.4 million with gross revenue of \$24.6 million in fiscal year 2009. Powertech's revenue and operating income is expected to grow as it implements its Strategic Plan.

Other Subsidiaries

BC Hydro has created a number of other subsidiaries to help us manage risk in developing projects and/or contracting with third parties. The Boards and management of these subsidiaries are made up of BC Hydro employees, who perform these duties without additional remuneration.

TRIPLE BOTTOM LINE REPORTING AND THE GLOBAL REPORTING INITIATIVE

BC Hydro prepares its Annual Report in compliance with the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines (G3 Guidelines). The GRI facilitates the transparency and accountability for organizations and provides stakeholders with a universally-applicable, comparable framework from which to understand disclosed information. GRI is an independent body, but remains an official collaborating centre of the United Nations Environment Programme (UNEP) and works in cooperation with United Nations Global Compact.

The GRI guidelines were developed through dialogue with a large network of stakeholders from over 60 countries which included representatives from communities such as business, accountancy, investment, environmental, human rights, research and labour organizations. GRI is now used by thousands of organizations worldwide to report on performance across the three dimensions of sustainability – financial, environmental, and social.

In 2006, BC Hydro became an Organizational Stakeholder (OS) of the Global Reporting Initiative. Organizational Stakeholders play an integral part in the GRI governance. In addition to becoming an OS member, we also participated in the development of the new Electric Utilities Sector Supplement (EUSS) guidelines which were released publicly in April 2009. The EUSS tailors GRI's Reporting Framework to the needs of the electric utility industry and includes additional sector-specific reporting guidance.

For the fiscal 2009 reporting period, BC Hydro continues the transition from the previously used 2002 GRI Sustainability Reporting Guidelines to the new G3 framework. As well, we begin to integrate some of the EUSS elements into our reporting processes.

BC Hydro's suite of sustainability performance measures is a combination of measures developed to track our achievement towards meeting our guiding principles and long-term goals as outlined in our annual Service Plan, measures derived from financial and operational statistics, and measures developed specifically to meet GRI reporting requirements.

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