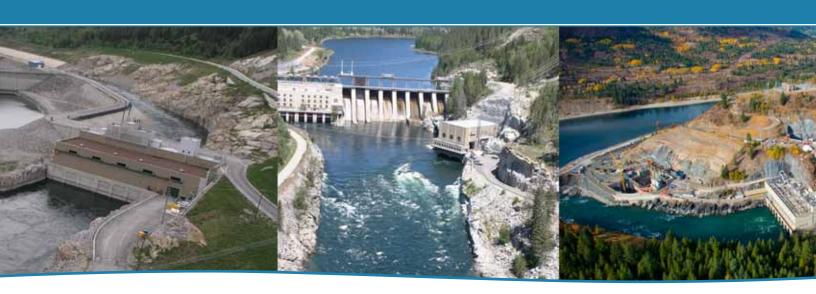
# COLUMBIA POWER CORPORATION

# SERVICE PLAN

2013/14 - 2015/16







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# **Honourable Rich Coleman**

Minister of Energy, Mines and Natural Gas

On behalf of the Board of Directors, I am pleased to submit Columbia Power Corporation's 2013/14—2015/16 Service Plan.

Columbia Power Corporation ("Columbia Power"), a commercial Crown corporation, develops and operates hydro power projects in the Columbia Basin. Columbia Power and its partner, Columbia Basin Trust ("CBT") own the Brilliant Dam and Generating Station, the Brilliant Terminal Station, the Arrow Lakes Generating Station and the Brilliant Expansion Generating Station and associated transmission lines. The Service Plan contemplates the continued safe, reliable operation of these facilities and the generation of clean hydro power which Columbia Power and CBT sell under long-term power purchase agreements. The Service Plan provides for Columbia Power to continue to use income from power sales to reinvest in hydro projects, support community initiatives and return a dividend to the Province.

In addition to the operation of its existing facilities, the three-year Service Plan horizon will see the completion of the Waneta Expansion Project, a new 335MW, \$900 million hydroelectric generating station adjacent to the Waneta Dam, 20 km south of Trail, BC. The Waneta Expansion Project is on-schedule to begin commercial operation in the spring of 2015. The Project is a partnership between Fortis Inc. (51%), a Canadian investor-owned hydro and gas utility, Columbia Power (32.5%) and CBT (16.5%). Columbia Power manages construction on behalf of the partnership. We extend our thanks to the Project team and our partners Fortis Inc. and CBT who are working with us to build this important addition to the portfolio of hydroelectric assets in the Columbia Basin.

Columbia Power has three priorities for the next year:

Continue to effectively manage the construction of the Waneta Expansion safely, on-schedule and on-

# budget, while meeting our community, First Nations and environmental commitments.

- The Project is on-schedule and on-budget; the Project recently reached over 1.1 million person-hours without a major safety or environmental incident.
- Currently over 300 people work on the Waneta Expansion Project; of those, over 75 per cent reside within 100 km of the Project. These employment opportunities and the associated economic benefits over \$123 million to date has been spent in the local economy—have a positive impact on the communities in the Columbia Basin.
- We continue to meet our First Nations commitments.

# Continue to effectively and efficiently manage the joint venture assets with CBT.

The joint venture assets continue to operate effectively.
 An unplanned outage at the Brilliant Expansion Generating Station resulted in additional cost and a decrease in revenue for the 2012/13 year; however, an outage provision combined with careful management of costs to the end of the fiscal year has allowed forecasted net income to stay on budget.

# Seek approval of and implement the proposed Columbia Power Strategic Plan 2012-2017.

Columbia Power has received the 2013/14 Government's
Letter of Expectations (the "Letter") from the Minister of
Energy, Mines and Natural Gas, as the representative of
the Government of British Columbia. The Letter defines
primary accountabilities and sets out the expectations
of the Government. In addition to the management of
its existing assets and the construction of the Waneta
Expansion Project, the Letter directs Columbia Power
to seek approval of and implement a strategic plan.
The company has developed a proposed strategy for
2012—2017 that includes finishing Waneta Expansion,
managing our existing assets well, and selectively
reinvesting in hydro generation in or near the Columbia
Basin. We are currently consulting on the proposed
strategy with local governments, the community

and First Nations and are working closely with the Ministry of Energy, Mines and Natural Gas to identify potential projects. We are interested in projects that take advantage of the expertise and experience at Columbia Power, in particular adding hydroelectric generation capacity to existing facilities. The projects would support British Columbia's energy objectives and related Provincial policy directions.

The market conditions for our industry continue to be challenging. Key factors which will affect our planning include:

- uncertainty regarding long-term energy prices, though the general view is that energy prices in the Pacific Northwest over the next five to ten years will be low due to excess supply;
- the impacts of shale gas and liquefied natural gas initiatives, which will need to be factored into Columbia Power's long-term planning;
- ongoing interest in clean renewable energy hydroelectric, biomass, wind, and as noted, renewed interest in natural gas.

The Corporation's 2013/14—2015/16 Service Plan was prepared under my direction in accordance with the *Budget Transparency and Accountability Act* and the BC Reporting Principles. The Plan is consistent with government's strategic priorities and fiscal plan. I am accountable for the contents of the Plan, including what has been included in the Plan and how it has been reported.

All significant assumptions, policy decisions, events and identified risks as of January 28, 2013 have been considered in preparing the Plan. The performance measures presented are consistent with the Corporation's mandate and goals and focus on aspects critical to the organization's performance. The targets in this Plan have been determined based on an assessment of the Corporation's operating environment, forecast conditions, risk assessment and past performance.

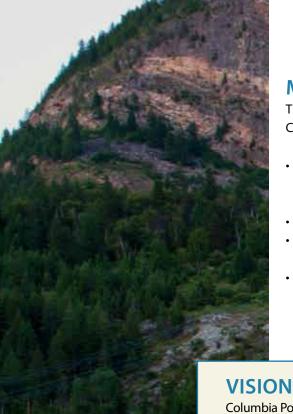
In summary, 2013/14 promises to be a year of significant opportunity for Columbia Power. We anticipate continued reliable performance of our existing assets, a year of intense, challenging construction on the Waneta Expansion Project and working with the Ministry of Energy, Mines and Natural Gas and BC Hydro on the advancement of a Columbia Power strategy that will look beyond the Waneta Expansion Project. Plant operations require constant diligence to ensure reliability—on a cost-effective basis. Given its size and complexity, the Waneta Expansion construction presents numerous risks such as environmental, geotechnical and financial to name a few. We have developed a comprehensive project register of risks and appropriate contingency, which is monitored continually by the project team and quarterly by the Board of Directors. Finally, the strategic direction of the Corporation will be challenging in the context of industry uncertainty noted above. In addition, it will require close collaboration with and support from the Ministry, BC Hydro, local government, First Nations and other key stakeholders.



# **Table of Contents**

Letter to the Minister	i
Mandate, Vision and Values	1
Corporate Structure	2
Organizational Overview	3
Project Locations in the Columbia Basin	4
Corporate Governance	5
Government's Letter of Expectations	7
Strategic Context	7
Performance Measures at a Glance	8
Performance Measures	9
Key Strategic Issues	10
Goals and Objectives	10
Summary Financial Outlook	21
Consolidated Statement of Income Forecast	21
Key Assumptions	21
Differences—2012/13 Service Plan vs 2013/14 Service Plan	22
Risk Factors and Sensitivities	23
Capital Plan	25
Performa Consolidated Balance Sheet	25
Consolidated Capital Spending Forecast	26
Liquidity and Sources of Capital	26
Subsidiary Table - Arrow Lakes Power Corporation	27
Subsidiary Table - Brilliant Power Corporation	28
Subsidiary Table - Brilliant Expansion Power Corporation	29
Glossary	30

# MANDATE, VISION AND VALUES



# **MANDATE**

The mandate of Columbia Power Corporation ("Columbia Power", or "the Corporation") is to:

- efficiently develop and operate commercially viable, environmentally sound and safe power project investments for the benefit of the Province and the residents of the Columbia Basin;
- act as the manager of power project joint ventures with Columbia Basin Trust;
- act as the Owner's Representative for construction of the Waneta **Expansion Project;**
- undertake strategic planning for the future of the Corporation.

Columbia Power's vision is to be a respected, continually improving company that maximizes shareholder value by developing and operating power projects in a socially and environmentally responsive manner, while achieving the development objectives of the Province and the Columbia Basin.

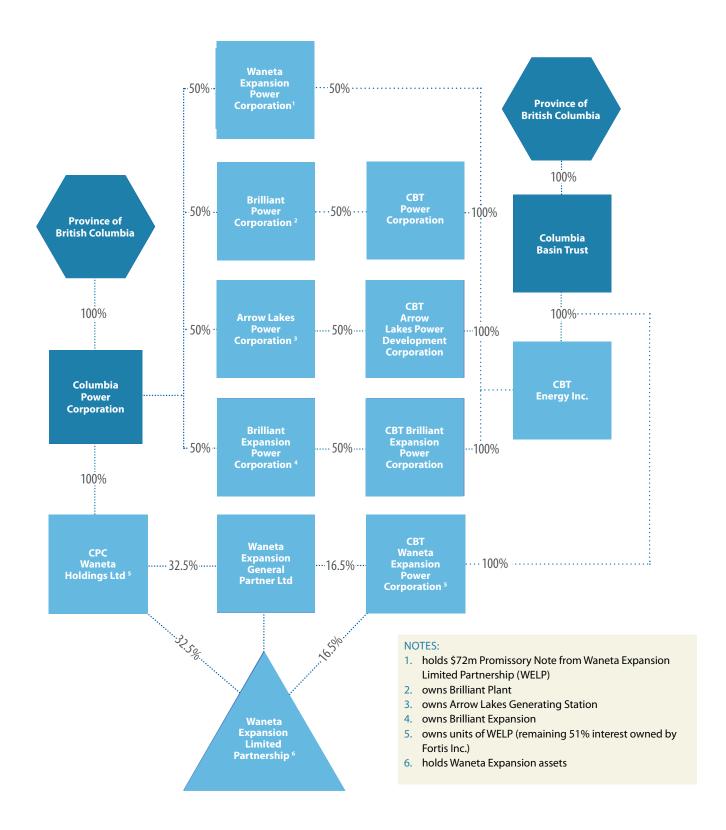
Acknowledged partner of choice in sustainable smart solutions powering our communities.

# **VALUES**

The following values guide how the Corporation works with its staff and external stakeholders:

- 1. Integrity
- 2. Respect
- 3. Versatility
- 4. Teamwork
- 5. Sense of Community
- 6. Promotion of Work/Life Balance
- 7. Sustainability

# Corporate Structure of Columbia Power Corporation/ Columbia Basin Trust Joint Ventures and Partnerships



Columbia Power Corporation ("Columbia Power") is a Crown corporation wholly owned and controlled by the Province of British Columbia, existing under the *Business Corporations Act* and reporting to the Minister of Energy, Mines and Natural Gas. Under the terms of its Agency Agreement with the Province, Columbia Power is confirmed as an agent of the government while reserving for Treasury Board the ultimate decision-making authority for new power project investment and significant financial restructuring.

Columbia Power is a cost-effective organization with its head office in Castlegar. The company focuses on asset management activities while engaging private-sector firms to provide construction, plant operation and specialist consulting services.

Columbia Power has historically undertaken power projects through joint ventures with subsidiaries of Columbia Basin Trust ("CBT"). Columbia Power owns 50% of the shares and manages all of the assets of the joint ventures. Under this model, Columbia Power built and oversees the operations of the 185 MW Arrow Lakes Generating Station, the 120 MW Brilliant Expansion Generating Station and the Brilliant Terminal Station. Columbia Power also oversees the operations of the 145 MW Brilliant Dam and Generating Station, which the partners purchased from Cominco (now Teck) in 1996. Through these assets, Columbia Power has a peak capacity of approximately 450 MW of electricity.

In addition to its reporting relationship to the Minister of Energy, Mines and Natural Gas, Columbia Power holds key relationships with CBT, BC Hydro, Teck, Fortis Inc., First Nations, regional districts, local communities and professional advisors.

The Brilliant Dam and Generating Station, the Arrow Lakes Generating Station, the Brilliant Expansion Generating Station and Brilliant Terminal Station are operated and maintained under agreement by FortisBC (a subsidiary of Fortis Inc.) or its related company, Fortis Pacific Holdings Inc., under the oversight of Columbia Power staff.

Most of the power generated at the current operating facilities is committed under long-term sales agreements to two utilities, FortisBC and BC Hydro. The remaining Brilliant Expansion energy and capacity has been committed to FortisBC under a new five-year agreement which runs through 2017. The Arrow Lakes Energy Purchase Agreement with BC Hydro has been extended until 2045. Due to the commercial arrangement with the Brilliant Dam and Generating Station, there is no outage risk, therefore no performance metrics are associated with outage costs.

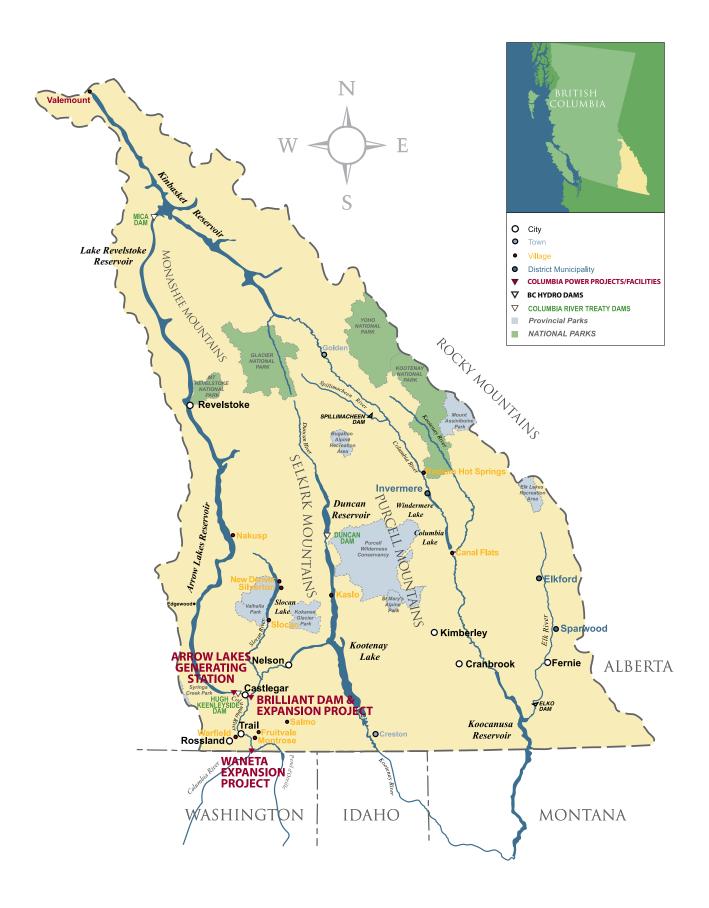
The Waneta Expansion Project is a partnership between Fortis Inc., Columbia Power and CBT. The partnership agreement provides Fortis Inc. a 51 per cent share of the Project, Columbia Power with 32.5 per cent and CBT with a 16.5 per cent share. Columbia Power is the Owner's Representative for design and construction and Fortis Inc. will be responsible for operations of the Waneta Expansion after construction. Long-term contracts for the purchase of capacity and energy have been signed with FortisBC and BC Hydro, respectively.

Columbia Power intercedes in regulatory proceedings as needed to ensure joint venture and partnership interests are appropriately addressed.

A portion of the returns from Columbia Power's share of the power projects is distributed to the Province annually in the form of dividends. CBT's portion is used to create a legacy of social, economic and environmental well-being for residents of the Columbia Basin.



Click below to read the history of Columbia Power online.
columbiapower.org/company/companyhistory.asp



# **PRINCIPLES**

The authorized number of Directors of the Corporation is six, all appointed by the Province and independent of management. As stewards of the Corporation, the Directors are committed to overseeing the conduct of the Corporation's business, applying the following governance principles:

# **Integrity:** Best Interests of the Corporation

The Directors will act with honesty and integrity, with a view to the best interests of the Corporation, recognizing their role in setting the ethical tone for the entire organization.

# **Direction with Oversight:** Support Management

The Directors will provide oversight and support to management to enable management to carry out their role without undue encroachment from the Board.

# **Commitment:** Well-Informed Decision-Making

Each Director will be committed to developing a strong understanding of the Corporation, its business, principal risks and strategic direction.

# **Skill Development:** Continuous Improvement

The Board will strive to identify and attract the combination of skills and characteristics among its Directors that are essential to providing high quality oversight to management. This will involve orientation of new Directors and measures designed to continuously improve the skills and competencies of all Directors.

# Communication

The Directors, having regard for the need to maintain confidentiality where appropriate, will communicate decisions and policies promptly and clearly within the organization and to others whose interests are affected.

# Respect

The Directors will conduct themselves in a manner that is respectful of each other and of the interests of the Corporation's stakeholders.

### **DIRECTORS**

- Lee Doney, Chair
- · Kim Deane
- Tim Newton

Tim Stanley, Vice Chair

- · Greg Deck
- · Lillian White

## **BOARD COMMITTEES**

The Corporation's committees address issues on behalf of the Board of Directors and report back to the Board on a regular basis.

The *Finance and Audit Committee* is responsible for financial and compliance oversight.

Members: Lillian White (Chair), Kim Deane and Tim Stanley.

The *Human Resources and Governance Committee* assists the Board in matters of human resources and compensation, including establishing a plan for continuity and development of senior management. This Committee is also responsible for providing a focus on governance that will enhance Columbia Power's performance.

Members: Greg Deck (Chair), Lee Doney and Lillian White.

The **Major Capital Projects Committee** assists the Board in its oversight responsibilities with respect to the operations of the Corporation's existing facilities and major capital projects.

Members: Tim Stanley (Chair), Kim Deane and Tim Newton.

# OFFICERS OF THE COMPANY

- Jane Bird, President and Chief Executive Officer
- Frank Wszelaki, Chief Operating Officer
- · Giulio Ambrosone, Vice President, Capital Projects
- Debbie Martin, Vice President, Human Resources & Corporate Services
- Karim Hirji, Vice President, Project Development
- · David de Git, Director, Finance
- Sheana Orr, Corporate Secretary

# SENIOR MANAGEMENT

- · Gene Anderson, Director, Operations
- · Llewellyn Matthews, Director, Environment

- Audrey Repin, Director, Stakeholder Relations and Communications
- Janice Hardy, Manager, Human Resources and Corporate Services

# THE PROVINCE OF BRITISH COLUMBIA AND COLUMBIA POWER CORPORATION

Columbia Power is wholly owned and controlled by the Province of British Columbia. As an agent of the Province, the Corporation develops and operates power projects in the Columbia Basin.

# KEY ACCOUNTABILITY RELATIONSHIPS

Pursuant to the Government's Letter of Expectations, the Board Chair and the Corporation's Chief Executive Officer communicate regularly with the Minister of Energy, Mines and Natural Gas or with a representative of the Ministry, to report on implementation of the Letter.

# COLUMBIA POWER CORPORATION'S JOINT VENTURES WITH COLUMBIA BASIN TRUST

Columbia Power owns three hydropower facilities in joint venture partnership with Columbia Basin Trust. The Boards of Directors of these jointly-owned corporations are comprised of six Directors, three nominated by Columbia Power and three nominated by CBT.

- Brilliant Power Corporation—owns the Brilliant
  Dam and Generating Station and the Brilliant
  Terminal Station. Directors: Greg Deck (Chair), Lee
  Doney, Lillian White, Neil Muth, Jane Bird and Kim
  Deane.
- Arrow Lakes Power Corporation—owns the Arrow Lakes Generating Station and associated 48-kilometre transmission line from the powerplant to BC Hydro's Selkirk substation. Directors: Greg Deck (Chair), Lee Doney, Lillian White, Neil Muth, Jane Bird and Kim Deane.
- Brilliant Expansion Power Corporation—owns the Brilliant Expansion Generating Station.
   Directors: Greg Deck (Chair), Lee Doney, Lillian White, Neil Muth, Jane Bird and Kim Deane.

In each case, Columbia Power is the managing partner of these assets.

# WANETA EXPANSION LIMITED PARTNERSHIP

The Waneta Expansion Project (being the development of a 335 MW Generating Station on the Pend d'Oreille River near Trail, BC) is owned by Waneta Expansion Limited Partnership (WELP); the limited partnership interests are owned 51% by Fortis Inc., 32.5% by Columbia Power, and 16.5% by Columbia Basin Trust. WELP is managed by a general partner, Waneta Expansion General Partner Ltd. (WEGPL), which is also owned by Fortis Inc., Columbia Power and Columbia Basin Trust. WEGPL has a Board of Directors of seven, comprised of four nominees of Fortis Inc., two nominees of Columbia Power, and one nominee of Columbia Basin Trust. Columbia Power acts as the Owner's Representative for the Waneta Expansion Project.

# **COMPLIANCE**

The Corporation is in compliance with the Board Resourcing and Development Office's board disclosure requirements for Crown corporations.

Click the link below to learn more about Columbia Power's Corporate Governance and about our Board of Directors:



Click the link below to learn more about the Province of British Columbia's Board Resourcing and Development Office:





# **GOVERNMENT'S LETTER OF EXPECTATIONS**

# Government's Letter of Expectations

# **Columbia Power Alignment**

# Waneta Expansion Project

Manage the construction of the Waneta Expansion Project to completion in 2015 safely, on-schedule and on-budget, while meeting Columbia Power's community, First Nations and environmental commitments Columbia Power will continue to manage the construction of the Waneta Expansion Project safely, on-schedule and on-budget, while meeting its environmental and community commitments until commencement of commercial operation in 2015. Columbia Power will continue to engage Project stakeholders through its Waneta Expansion Community Impact Management Committee and continue to coordinate with the Ktunaxa Nation Council and Okanagan Nation Alliance in the implementation of their respective community benefits agreements.

# **Management of Existing Facilities**

Manage the operation of existing facilities to meet financial and other performance targets

Columbia Power will proactively manage the operation of its existing facilities—Brilliant Dam and Generating Station and Expansion and the Arrow Lakes Generating Station—in order to meet its targets.

# Strategic Plan and Enterprise Risk Management

Seek approval and implement the Columbia Power Strategic Plan and continue to implement the Enterprise Risk Management Plan and to report to Government on the progress of both initiatives.

Columbia Power has been encouraged by regional government and key stakeholders to develop opportunities after the completion of the Waneta Expansion Project. In consultation with representatives from the Ministry of Energy, Mines and Natural Gas and BC Hydro, Columbia Power will develop and implement its Strategic Plan. The Strategic Plan will also involve consultation with potential partners, local government and key stakeholders. Concurrently, Columbia Power will continue to develop its Enterprise Risk Management Plan.

# **Policy Development**

Work with the Government to identify current or upcoming issues that could require provincial policy development and assist with implementation of any such policies.

As part of ongoing communication with the Ministry of Energy, Mines and Natural Gas, Columbia Power will meet quarterly with the Ministry to coordinate on substantive issues. In addition, Columbia Power will work with the Ministry of Energy, Mines and Natural Gas and other relevant ministeries to address potential issues as they arise. Columbia Power will also assist the Government in any policy implementation activities that are required.

# Strategic Context

Columbia Power's power projects operate in a domestic power market where there is a single dominant whole-sale purchaser as well as independent power producers. Long-term firm transmission capacity to adjacent power markets in Alberta and the US Pacific Northwest is constrained due to transmission capacity limitations. The operating environment is complex and includes federal and provincial regulators, an international treaty, as well as local, regional, United States, and First Nations stakeholders.

Columbia Power has successfully completed two power projects—the Arrow Lakes Generating Station and the Brilliant Expansion—and a major plant refurbishment, the Brilliant Dam and Generating Station. The third power project, the Waneta Expansion, is currently on-schedule and on-budget with no major environmental or safety incidents. Going forward, Columbia Power is looking to grow strategically in the power generation business by utilizing its expertise in all aspects of hydroelectric project development: feasibility assessment, community consultation, permitting, procurement, contract negotiations, risk allocation, construction oversight, commissioning and operation. Columbia Power has the resources to meet its planned results and does not foresee any significant challenges in achieving objectives.

# PERFORMANCE MEASURES AT A GLANCE

The 2011/12 fiscal year is the most recent completed fiscal year and is included for historic context. 2012/13 is the current fiscal year. Information related to this year is a forecast to fiscal year end, March 31, 2013.

Goal 1 - Success of the Waneta Expansion	ı Project	t
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OMA - Operations, Maintenance and Administration
 CEA - Canadian Electricity Association

3. AIF - All Injury Frequency 4. WSBC - WorkSafeBC

Goal 1	- Success of the Waneta Exp	ansion Project Benchmark	2011/12 (actual)	2012/13 (forecast)	2013/14	2014/15	2015/16
1.1	Waneta Expansion is on- schedule	Early or on schedule (no negative variance from schedule)	WAX on-schedule	WAX on-schedule	WAX on-schedule	WAX on-schedule	WAX on-schedule
1.2	Waneta Expansion is on- budget	On or under budget (no negative variance from budget)	WAX on-budget	WAX on-budget	WAX on-budget	WAX on-budget	WAX on-budget
1.3.1	Waneta Expansion Regulatory Compliance (Safety) Refer to Page 11	< or = 4 (Injury Rate)	0.32	< or = 3	< or = 3	< or = 3	< or =3
1.3.2	Waneta Expansion Regulatory Compliance (Environmental) Refer to Page 12	One major environmental incident per year	0	< or = 1	< or = 1	< or = 1	< or = 1
Goal 2	- Efficient and Reliable Plan	t Operations Benchmark	2011/12 (actual)	2012/13 (forecast)	2013/14	2014/15	2015/16
2.1.1	Equivalent Availability Rate (Hours) Refer to Page 13	ALH: >90.1% BRX: >90.1%	ALH: >90.4% BRX: >85.1%	ALH: >88.0% BRX: >85.0%	ALH: >88.0% BRX: >88.0%	ALH: >92.2% BRX: >88.0%	ALH: >88.7% BRX: >89.5%
2.1.2	Equivalent Availability Rate (MWh) Refer to Page 14	ALH: >96.3% BRX: >96.4%	ALH: >99.4% BRX: >84.3%	ALH: >99.0% BRX: >92.5%	ALH: >96.0% BRX: >93.5%	ALH: >96.2% BRX: >93.5%	ALH: >96.1% BRX: >96.0%
	OMA¹ Costs (\$ per MWh) Refer to Page 14	6.8 (2nd Quartile)	ALH: 5.84 BRX: 12.4	ALH: 7.5 BRX: 13.3	ALH: 7.4 BRX: 13.3	ALH: 6.8 BRX: 14.0	ALH: 7.0 BRX: 14.1
2.3.1	Regulatory Compliance (Safety) Refer to Page 15	CEA <sup>2</sup> AIF <sup>3</sup> for CPC employees - 1.4 WSBC <sup>4</sup> AIF for Contractors - 1.7	0	< or = to CEA benchmark < or = to WSBC benchmark	< or = to CEA benchmark < or = to WSBC benchmark	< or = to CEA benchmark < or = to WSBC benchmark	< or = to CEA benchmark < or = to WSBC benchmark
2.3.2	Regulatory Compliance (Environmental) Refer to Page 15	1.3 major environmental incidents per year	1	< or = 1 major environmental incident	< or = 1 major environmental incident	< or = 1 major environmental incident	< or = 1 major environmental incident
2.3.3	Mandatory Reliability Standards Refer to Page 16	No sanctionable events attributed to Columbia Power/CBT joint ventures	0	0	0	0	0
Goal 3	- Effective Financial Plannin	g Benchmark	2011/12(actual)	2012/13 (forecast)	2013/14	2014/15	2015/16
3.1	Debt service coverage ratio (DSCR)	DSCR 1.3 or greater	Maintained Investment Grade rating for all bonds	Maintain Investment Grade rating for all bonds	Maintain Investment Grade rating for all bonds	Maintain Investment Grade rating for all bonds	Maintain Investment Grade rating for all bonds
3.2	Return on Equity	Over the life of a project, compared to a regulated utility	3.4%	4.0%	4.0%	4.0%	5.7%
3.3	<b>EBITDA</b> ⁵ (\$ in thousands)	EBITDA growth	14,437	18,050	19,227	20,012	29,531
3.4	Free Cash Flow (\$inthousands)	Consistent with target	93,731	(58,297)	(24,084)	2,417	13,084
Goal	4 - Approval and Implement	ation of the Strategic Benchmark	Plan 2011/12 (actual)	2012/13	2013/14	2014/15	2015/16
	Final Approval of the Strategic Plan	Final approval and implementation of 2012-2017 Strategic Plan	Strategic Planning Workshop conducted with Board	Submit proposed Strategic Plan to Government for final approval; Conduct community consultation	Implement the Strategic Plan	Review of the Strategic Plan	Review of the Strategic Plan
4.2	Development of New Projects (subject to approval of proposed Strategic Plan	Power Projects defined and approved for develop- ment in 2013/14	Completed preliminary work for proposed project	Commence early activities for proposed project(s); preliminary community consultation		Continue activities for new project(s)	Continue activities for new project(s)

5. EBITDA - Earnings Before Interest, Taxes, Depreciation and Amortization

# PERFORMANCE MEASURES FRAMEWORK

Columbia Power's performance measures framework follows the *Budget Transparency and Accountability Act* requirements for performance measures, benchmarks and targets linked to specific goals, objectives and strategies. The framework also reflects Columbia Power's dual functions as a development company and an operating company. The framework provides broad goals and underlying objectives, aligns specific corporate strategies to each objective, incorporates ongoing research regarding suitable benchmarks and targets, and provides discussion of the significance of results.

# **BACKGROUND**

Columbia Power has two specific and two broad goals; specifically, its mandate as the Owner's Representative for Waneta Expansion and the manager of Columbia Power/CBT joint venture assets; and more broadly, to accurately state its financial status and to obtain approval and implement a Strategic Plan.

**Goal 1: Success of the Waneta Expansion Project** 

**Goal 2: Efficient and Reliable Plant Operations** 

**Goal 3:** Effective Financial Planning

Goal 4: Approval and Implementation of the Strategic Plan

# OUTLOOK

Columbia Power believes the performance measures it uses highlight the most crucial aspects of its performance but are also subject to refinement and evolution as the organization matures. The metrics defined were developed using industry benchmark reports compared to actual data and are intended to provide the most accurate representation of the Corporation's business performance. Work continues going forward to develop an assessment management approach for its operating facilities and managing its projects.

# **SOURCE OF DATA AND RELIABILITY**

Columbia Power believes its performance measures are reliable and valid. Current and historical performance measures are not audited, however, they are largely based on audited information, information subject to third-party verification, and information that is obtained from independent sources.

- Project development and construction effectiveness measures are based on information from project tracking systems and monthly status reports prepared by the design/build contractor and consultants employed by the Corporation.
- The reliable plant operations measure is based on plant outage and generation data that are reconciled with BC Hydro and FortisBC.
- The financial measures are derived from the Corporation's audited consolidated financial statements.
- Bond ratings are independently verifiable.
- Environmental compliance measures are based on information in the Environmental, Health & Safety Management System which is consistent with ISO 14001 and OHSAS 18001 and is annually audited by third-party auditors.
- Safety compliance measures are derived from industry and are independently verifiable.

The Waneta Expansion Project continues to be under construction. Performance measures have been developed to ensure the success of the Project, which is Goal 1 of the Corporation. The metrics are: on-schedule and on-budget, and meeting safety and environment commitments. Goal 2, Efficient and Reliable Plant Operations has metrics that were selected to track and compare joint venture asset performance with respect to compliance, reliability, and cost effective operations. The metrics are: availability, operations, maintenance and administrative costs, safety, and regulatory compliance. Goal 3, Effective Financial Planning has metrics that are based on government regulations and sound financial practices. The metrics are: debt-service coverage ratio, return on equity, EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization), and free cash flow. Goal 4, Strategic Planning, has metrics that measure development targets for the corporation. The metric targets are: approval and implementation of the Strategic Plan and development of new projects.

# **Key Strategic Issues**

The key strategic issues facing Columbia Power include:

- Managing construction of the Waneta
   ExpansionProject until commercial operation
   in 2015—safely, on-schedule and on-budget,
   while meeting community, First Nations and
   environmental commitments. The expertise of staff
   in design-build construction projects, together with
   their relationships with public and private partners,
   provincial, regional and local governments, First
   Nations and private-sector utility, construction,
   engineering and allied firms is vital to the success of
   the Project.
- Continuing to effectively and efficiently manage the joint venture assets with Columbia Basin Trust including: major hydroelectric facility owner's risks of human and dam safety, equipment availability and the environment.
- Ensuring expected revenues are met through performance of generating assets.
- Ensuring on-going support for the power projects with local and regional community stakeholders and First Nations.
- Continuing work on future strategic planning in consultation with the Minister of Energy, Mines and Natural Gas, BC Hydro and local stakeholders to identify potential projects that take advantage of Columbia Power's expertise and experience.

# **Goal 1**

# Success of the Waneta Expansion Project (WAX)

The Waneta Expansion Project is a \$900 million hydroelectric construction project which includes a 10 km transmission line. Columbia Power is the Owner's Representative and oversees the design-build contractor, SNC-Lavalin Inc. for design and construction of the powerplant and oversees construction of the transmission line. Over the next 2.5 years, the success of the Project will be largely determined by Columbia Power's ability to ensure the following:

# **OBJECTIVE 1.1** WANETA EXPANSION IS ON-SCHEDULE Strategy

The Waneta Expansion Limited Partnership (WELP), in which Columbia Power has a 32.5% interest, is the Owner of the Waneta Expansion Project. It has signed a design-build contract with SNC- Lavalin Inc. Columbia Power performs the role of Owner's Representative and oversees the implementation of the work under the design-build contract. The design-build contract specifies a Substantial Completion Milestone Date of 15 May 2015 on which Owner operation commences. As an incentive to the Contractor to achieve Substantial Completion prior to the Substantial Completion Milestone Date, the design-build contract includes revenue share provisions. The design-build contract also includes liquidated damages for delay to the Substantial Completion Milestone Date. However, despite there being milestone events specified in the contract, unanticipated delays can result and must be managed by Columbia Power as the Owner's Representative.

# **Benchmark**

The benchmark is for WAX to be completed on or before the Substantial Completion Milestone Date (15 May 2015) specified in the design-build contract. The target is to achieve a variance of less than or equal to zero, indicating the project is tracking towards Substantial Completion early or on-schedule.

# **Benchmark**

The Waneta Expansion Project is on or ahead of schedule relative to the Substantial Completion Milestone Date of 15 May 2015. No negative variance from schedule.

# **Targets**

3		
2012/13 (actual)	0	
2012/13 (forecast)	WAX under construction (variance < or = 0)	
2013/14	WAX under construction (variance $<$ or $=$ 0)	
2014/15	WAX under construction (variance < or = 0)	
2015/16	WAX under construction (variance < or = 0)	

# Discussion

Project delays may push back the receipt of revenues and can impair project economics.

### **OBJECTIVE 1.2** WANETA EXPANSION PROJECT IS ON-

### **BUDGET**

# Strategy

The design-build contract has a fixed-price and provides for performance-based penalties and incentives. However, unanticipated costs can result in claims by the design-build contractor or other third-party costs which must be managed by Columbia Power as the Owner's Representative, in consultation with the Owner.

#### **Benchmark**

The benchmark is for WAX to be completed on-budget. The budget is the project capital budget as approved by the Owner. The target is to achieve a variance of less than or equal to zero, indicating the project is tracking towards commercial operation either on or under budget.

#### Benchmark

The Waneta Expansion Project is on or under budget. No negative variance from budget.

# **Targets**

2011/12 (actual)	0
2012/13 (forecast)	WAX under construction (variance < or = 0)
2013/14	WAX under construction (variance < or = 0)
2014/15	WAX under construction (variance < or = 0)
2015/16	WAX under construction (variance $<$ or $=$ 0)

# Discussion

Although the fixed-price contract provides as much construction price certainty as possible, project cost overruns can impair project economics.

# **OBJECTIVE 1.3** WANETA EXPANSION PROJECT REGULATORY COMPLIANCE (SAFETY AND ENVIRONMENTAL)

# **1.3.1 SAFETY**

# Strategy

Columbia Power has a corporate commitment to safety on Columbia Power-managed projects that goes beyond strict regulatory compliance. Columbia Power acts as the Owner's Representative for WAX and therefore has a responsibility to monitor the contractor's performance in fulfilling its contractual obligations, which includes an obligation to comply with Provincial safety regulations. Columbia Power's safety strategy for the Waneta Expansion Project includes:

- A dedicated section on safety requirements and reporting within the design-build contract.
- Appointing the design-build contractor as prime contractor.
- A requirement for the contractor to employ a fulltime safety manager along with the requirement for the contractor to perform regular safety audits as to the effectiveness of the Project's health and safety plan and for the performance of the prime contractor.
- Participating in safety coordination meetings with the contractor.
- Participating in joint safety audits with the contractor.
- Participating in the Project safety incentive program.
- A Project-specific safety program is in place for Columbia Power employees.
- Employment by Columbia Power of an independent safety professional/auditor to conduct independent audits of health and safety on the Project.

# Benchmark

Columbia Power will use the WorkSafeBC (WSBC) lost time injury (LTI) rate for the heavy construction industry as a benchmark. This is defined as the number of claims (those receiving short-term disability, long-term disability or survivor benefits in the year of injury or first quarter of the following year) per 100 person-years of employment. The WSBC LTI rate for 2011 was 4.0.

# **Target**

The Waneta Expansion Project will proactively target to have an injury rate 1.0% lower than the 2011 average for the BC heavy construction industry and therefore being less than or equal to 3.0. The target for subsequent years will be evaluated on an annual basis using the WorkSafeBC year end results.

### **Benchmark**

< or = 4.0 Injury Rate WSBC		
0.32		
< or = 3.0		

### Discussion

The safety risks, and therefore the number of injuries associated with the Project will vary with the type of construction activity and the associated safety hazards at various phases of the Project. Rates will be highest during the initial stages of the Project when the major civil construction activity is taking place and are expected to fall as the Project moves to the electrical/mechanical installation phase and finally commissioning.

# 1.3.2 ENVIRONMENT

# Strategy

The Waneta Expansion Project was the subject of a thorough environmental assessment (EA). The conclusion of the assessment was that there would be no significant adverse environmental effects from the Project and that there would be some significant environmental benefits. The Environmental Assessment Certificate (EAC) provides for a series of Owner's commitments and a set of environmental performance standards for construction (the Owner's Environmental Requirements for Construction or OERC). Columbia Power acts as the Owner's Representative for Project construction and therefore has the responsibility to fulfill the Owner's commitments and ensure the OERC are met. This is accomplished through:

- Developing and implementing environmental programs.
- Including detailed environmental requirements for construction in the design-build contract.
- Reviewing the contractor's Environmental Management Plan.
- Reviewing the contractor's Environmental Work Plans.

- Conducting third-party compliance audits on the contractor.
- Employing an environmental professional to conduct Owner's environmental oversight on the Project.
- Requiring the contractor to employ a full-time independent environmental manager to carry out the environmental requirements under the contract.
- Providing a full-time independent project environmental monitor pursuant to the water license for the Project.

# **Benchmark**

Fulfilling the EAC commitments is a requirement of the Project's EAC and Columbia Power is required to report on the status of the Owner's commitments at regular intervals during the Project.

The number of environmental incidents is one measure of environmental performance. However, apart from reportable spills, there is no standard definition of an incident or collection of industry statistics against which to benchmark. Columbia Power's Environment, Health and Safety Management System defines a major incident (environmental aspect) as one that involves corrective action requiring off-site or third-party resources, or a breach of regulatory requirements.

# **Target**

- Fulfillment of Owner's Commitments.
- No more than one major environmental incident per year.

# **Benchmark**

One majo	r environmental incident per ye	ear
Targets	Compliance with Owner's Commitments	Major Environmental Incidents
2011/12 (actual)	All relevant commitments complete or in progress	0
2012/13 (forecast)	All relevant commitments complete or in progress	< or = 1
2013/14	All relevant commitments complete or in progress	< or = 1
2014/15	All relevant commitments complete or in progress	< or = 1
2015/16	All relevant commitments complete or in progress	< or = 1
•••••	•••••••••••••••••••••••••••••••••••••••	

# Discussion

Under the EAC, the Owner must submit three reports on compliance with the Owner's Commitments: prior to construction, one month after the start of operations, and one year after the start of operations.

# Goal 2

# **Efficient and Reliable Plant Operations**

# **OBJECTIVE 2.1 RELIABLE PLANT OPERATIONS**

# Strategy

Under the terms of agreements with BC Hydro, Columbia Power/CBT joint ventures receive fixed amounts of energy and capacity entitlements in exchange for the assets' physical generation. This eliminates the uncertainty associated with water flow (hydrology risk). The entitlements are based on long-term average water flows. BC Hydro benefits by optimizing the overall generation of the Columbia-Kootenay hydroelectric system. The entitlements represent potential revenues available to the Columbia Power/CBT joint ventures. The entitlement received is negatively impacted by planned and unplanned outages. The strategic objective is to be reliable and cost-effective by striving to improve plant reliability, reducing forced outage durations and optimizing planned outage scheduling.

# Plant Availability

Plant availability benchmarks are a measure for Columbia Power to assess asset reliability performance relative to industry peers and the Corporation's own performance based on internal criteria. Targets reflect Columbia Power's annual performance forecasts based on outage durations required for planned maintenance, periods of major maintenance and capital projects. Asset reliability metrics have been reviewed extensively by Columbia Power to ensure a meaningful measure of availability is used by the Corporation. Columbia Power has engaged Navigant Consulting Inc. to provide benchmarking services, including the provision of a report detailing the compilation of industry benchmarks. Columbia Power has received the 2011 Navigant study "Hydro 2011: Hydroelectric Generation Benchmarking Program" (the Navigant Study).

Columbia Power has identified two metrics for Plant Availability: Equivalent Availability Rate (Hours) and Equivalent Availability Rate (MWh). The Equivalent Availability Rate (Hours) references the Navigant Study as the benchmark. The Equivalent Availability Rate (MWh) references an internal benchmark.

# 2.1.1 EQUIVALENT AVAILABILITY RATE (HOURS)

This metric is the number of hours each generating unit is available annually, accounting for both planned and forced (unplanned) outages, relative to the total number of generating hours available. This metric allows a comparison of Columbia Power's performance relative to an external benchmark.

### **Benchmark**

The benchmark is the average equivalent rate for medium-sized hydro plants in operation for less than forty-five years, as provided by the Navigant Study. The benchmark is 90.1%.

# **Target**

The long-term target is to meet or exceed the benchmark. Interim annual targets reflect extended periods of major planned maintenance to commence in 2012/13 and, as a result, a slight increase in the potential for forced (unplanned) outages.

# **Benchmark**

>90.1% Arrow Lakes Hydro (ALH)

>90.1% Brilliant Expa	nsion (BRX)	
Targets		
2011/12 (actual)	ALH: >90.4%	BRX: >85.1%
2012/13 (forecast)	ALH: >88.0%	BRX: >85.0%
2013/14	ALH: >88.0%	BRX: >88.0%
2014/15	ALH: >92.2%	BRX: >88.0%
2015/16	ALH: >88.7%	BRX: >89.5%
	••••••	

# Discussion

Equivalent Availability Rate (hours) can be compared to other hydro operators with similar assets. The targets for this metric are based on forecast planned maintenance and forced outages. Major maintenance periods can vary in duration from the typical annual planned outages. Forced outages may increase during major equipment warranty periods, early plant lifecycle abnormalities and after major maintenance activities.

# 2.1.2. EQUIVALENT AVAILABILITY RATE (MWh)

This metric is the number of entitlement megawatt hours (MWh) available to each facility annually accounting for both planned and forced (unplanned) outages, relative to the total entitlement MWh available to each facility. This metric allows a comparison of Columbia Power's revenue capture performance relative to an internal benchmark.

The Equivalent Availability Rate (MWh) is the entitlement consequence of the Equivalent Availability Rate (Hours) and reflects the timing of the planned and forced (unplanned) outages during the year. As such, this metric relates directly to the revenue forecast.

# Benchmark

Columbia Power uses historic and forecast production levels based on internal data. The benchmark reflects an optimal scenario of reliable plant operation and efficiently completing maintenance outages.

# **Target**

The long-term target is to meet or exceed the benchmark.

# Benchmark

>96.3% ALH >96.4% BRX	7 7 6.6 7 6 7		
Targets			
2011/12 (actual)	ALH: >99.4%	BRX: >84.3%	
2012/13 (forecast)	ALH: >99.0%	BRX: >92.5%	
2013/14	ALH: >96.0%	BRX: >93.5%	
2014/15	ALH: >96.2%	BRX: >93.5%	
2015/16	ALH: >96.1%	BRX: >96.0%	

### Discussion

As the metric is entitlement based, it is not comparable to external industry metrics, but is useful for Columbia Power's purposes. As with the Equivalent Availability Rate (Hours) metric, major maintenance periods can vary in duration from those expected. Forced outages may increase during major equipment warranty periods, early plant lifecycle abnormalities, and after major maintenance activities.

# **OBJECTIVE 2.2** OPERATIONS, MAINTENANCE AND ADMINISTRATION COSTS

This metric is the Operations, Maintenance and Administration (OMA) costs for each plant divided (net of allowance for outages) by entitlement energy for that plant, in dollars per megawatt hour (MWh). It is a key measure of plant operational cost efficiency.

# Strategy

Columbia Power endeavours to manage its joint ventures effectively and efficiently and to achieve OMA costs within industry norms. Under the terms of the long-term, fixed-price power sales agreements, Columbia Power has limited ability to adjust the contract price to flow through cost increases. Brilliant Expansion is the exception. In that case, OMA costs flow through to FortisBC so Columbia Power/CBT joint venture revenues are not impacted.

# **Benchmark**

Columbia Power participates in the Navigant Study annually to gauge plant performance relative to industry. A normalized version of the Partial Function Cost benchmark from the Navigant Study is used.

# **Benchmark**

•
6.8 (2nd quartile)
Normalized Partial Function Cost benchmark from the
Navigant Study

# Targets (\$ per MWh)

2011/12 (actual)	ALH: 5.84	BRX: 12.4
2012/13 (forecast)	ALH: 7.5	BRX: 13.3
2013/14	ALH: 7.4	BRX: 13.3
2014/15	ALH: 6.8	BRX: 14.0
2015/16	ALH: 7.0	BRX: 14.1

# **GOALS AND OBJECTIVES**

# Discussion

Columbia Power adjusted the Partial Function Cost benchmark to allow for different input variables including physical generation versus entitlement and cost categorization differences. In addition, the adjusted benchmark normalized regional labour rates and \$CAD/\$US conversions incorporated in the Navigant Study. The OMA costs per MWh hour for Brilliant Expansion over the forecast period are significantly higher than the benchmark. Brilliant Expansion is still early in its operating life and as a result is addressing design issues that have the potential to affect reliability. The plant will be undergoing a design review to identify and correct deficiencies that will ultimately reduce OMA targets.

# **OBJECTIVE 2.3** REGULATORY COMPLIANCE (SAFETY AND ENVIRONMENT)

# **2.3.1 SAFETY**

# Strategy

Health and safety are core values of Columbia Power. Our goal is to ensure every Columbia Power employee and worker at Columbia Power managed projects and offices returns home from work safely. Columbia Power has a Health and Safety Policy and has developed an Environment, Health and Safety Management System that is consistent with OHSAS (Occupational Health and Safety Assessment Series) 18001 to achieve this goal.

# Benchmark

Columbia Power uses two benchmarks:

- The Canadian Electricity Association (CEA) All Injury Frequency (AIF) defined under CEA's Group III having <300 employees as the number of lost-time injuries and medical aids occurring in the last 12 months per 200,000 hours worked.
- The second benchmark is related to our operating plants and references the database of WorkSafeBC (WSBC) around lost time injuries and medical aids, referenced as an All Injury Frequency (AIF). The AIF rate for utilities is calculated from the number of losttime injuries and medical aids occurring in the last 12 months per 200,000 hours worked.

The Columbia Power statistics being reported include a Canadian Electricity Association AIF for its employees and a WorkSafeBC AIF for its contracted employees working at the power plants and projects (not including WAX, which is reported under Goal 1).

# Target

Columbia Power will target an AIF less or equal to the CEA and WorkSafeBC benchmarks for the 2012 calendar year.

### **Benchmark**

CEA AIF for CPC Employees 1.4 WSBC AIF for Contractors 1.7

Targets		
	CPC Employee AIF (Incidents)	Contractors AIF (Incidents)
2011/12 (actual)	0	0
2012/13 (forecast)	< or = to CEA benchmark	< or = to WSBC benchmark
2013/14	< or = to CEA benchmark	< or = to WSBC benchmark
2014/15	< or = to CEA benchmark	< or = to WSBC benchmark
2015/16	< or = to CEA benchmark	< or = to WSBC benchmark

# Discussion

It is difficult to compare Columbia Power with industry peers based on the size of the Corporation and its operating model of primarily contracting work at its plants and projects. Based on Columbia Power's employee number of exposure hours, one or two incidents will result in large changes in the corporate rates leading to greater volatility and making the identification of trends difficult.

# 2.3.2 ENVIRONMENT

# Strategy

Environmental stewardship is also a core value of Columbia Power. The Corporation has an Environmental Policy and has developed an Environment, Health and Safety Management System that is consistent with ISO 14001 to implement the policy.

Columbia Power also complies with the Government's directive to be carbon neutral under the *Greenhouse Gas Emissions Target Act*. The Corporation's Carbon

Neutral Plan is ongoing and includes monitoring its fuel, paper and electrical usage. Monitoring results are reported annually in the Corporation's "Carbon Neutral Report." Carbon neutrality is achieved through Pacific Carbon Trust.

# **Benchmark**

The number of environmental incidents is one measure of environmental performance. However, apart from reportable spills, there is no standard definition of an "incident" or collection of industry statistics against which to benchmark. Columbia Power's Environmental, Health and Safety Management System defines a major incident (environmental aspect) as one that "involves corrective action that requires off-site or third-party resources, or a breach of regulatory requirements." Columbia Power has averaged 0.43 major environmental incidents per operating facility per year since 2004, resulting in an internal benchmark of 1.30 major environmental incidents per year for the three current operating facilities.

# **Target**

No more than one major environmental incident per year.

# **Benchmark**

1.3 major environmental incidents per year			
	Targets (Incidents)		
	2011/12 (actual)	1	
	2012/13 (forecast)	< = 1 major environmental incident	
	2013/14	< = 1 major environmental incident	
	2014/15	< = 1 major environmental incident	
	2015/16	< = 1 major environmental incident	

# Discussion

Mitigation plans to reduce the risk of harm to white sturgeon at Brilliant Expansion appear to be effective and there have been no incidents since the fall 2009. Equipment replacement plans have been advanced at Arrow Lakes to reduce the risk of oil leaks to the river.

# 2.3.3 MANDATORY RELIABILITY STANDARDS

# Strategy

In 2009, BC Reg. 32/2009 was issued, mandating Columbia Power and other generation and transmission entities to register with the British Columbia Utilities Commission (BCUC) and to file a mitigation plan confirming compliance with Mandatory Reliability Standards (MRS). Failure to comply with these standards could result in financial penalties and/or sanctions.

# Benchmark/Target

No sanctionable events attributable to the Columbia Power/CBT joint ventures.

### **Benchmark**

No sanctionable events attributable to the CPC/CBT joint ventures.

### **Targets**

2011/12 (actual)	0
2012/13 (forecast)	0
2013/14	0
2014/15	0
2015/16	0
•••••	•

# Discussion

Pursuant to agreements between FortisBC and the joint ventures and as approved by the BCUC, FortisBC has assumed the role of managing MRS for the joint venture assets. In that capacity, FortisBC is in the process of filing mitigation plans. However, a residual exposure remains for the Columbia Power/CBT joint venture assets.

# Goal 3

# **Effective Financial Planning**

Financial planning is important to gauge profitability, viability and resource capacity which together contribute to Columbia Power's financial sustainability. This broad goal is linked to four metrics:

- 1. Debt-service coverage ratio
- 2. Return on equity
- 3. EBITDA
- 4. Free cash flow

# **OBJECTIVE 3.1** DEBT-SERVICE COVERAGE RATIO

#### Strategy

The Debt-Service Coverage Ratio (DSCR) is a measure of creditworthiness used to determine an organization's ability to service current debt, measured as net income before interest and amortization of assets, divided by interest plus debt principal repayment. High debt service coverage ratios reflect an ability to raise additional limited-recourse project debt on favourable terms and also provide comfort on current debt service obligations. The strategy is to maintain DSCR that is favourably regarded by stakeholders and bondholders.

# Benchmark

The benchmark generally used by rating agencies to establish an investment grade bond rating is a debt service coverage ratio of 1.3 or greater.

# Target

For Columbia Power/CBT joint ventures that have issued bonds, the target is to achieve an investment grade bond rating.

# **Benchmark**

# DSCR 1.3 or greater Targets

2011/12 (actual)	Maintained Investment Grade rating for all bonds
2012/13 (forecast)	Maintain Investment Grade rating for all bonds
2013/14	Maintain Investment Grade rating for all bonds
2014/15	Maintain Investment Grade rating for all bonds
2015/16	Maintain Investment Grade rating for all bonds

### Discussion

Rating agencies review the ratings on existing bonds periodically. In addition, Arrow Lakes Power Corporation issued \$350 million of Series B bonds secured by the assets of and revenues from the Arrow Lakes Generating Station. In order for Arrow Lakes Power Corporation to achieve the benchmark DSCR for the fiscal years 2012 to 2016, it established a series of liquidity reserves to provide security to bond holders during those years.

# **OBJECTIVE 3.2 RETURN ON EQUITY**

# Strategy

The Corporation attempts to achieve a return on equity that is broadly consistent with similar projects in similarly regulated environments. Overall, the strategy is to maximize revenues generated through power purchase agreements with FortisBC, BC Hydro, Powerex and others, and to control costs associated with plant operations and related programs. Long-term power sales agreements with these parties allows the Corporation to avoid both market risk (risk of fluctuations in sales prices) and credit risk (risk that a counterparty will default on a sales agreement.)

# Benchmark

Suitable industry benchmarks are not readily available. Typically, power projects must "back-end load" their return on equity. In other words, the returns are greater in the later years of a project's life. Regulated utilities such as BC Hydro and FortisBC have their return on equity set by the British Columbia Utilities Commission; however this is not the case with Columbia Power.

# **Target**

Overall, the objective is, over a project's life, to earn a return on equity comparable with that earned by regulated utilities. This measure reports return on equity, calculated as consolidated net income divided by consolidated equity (contributed surplus retained earnings).

### **Benchmark**

Over the Life of a Project, Comparable to Regulated Utilities

# **Targets**

2011/12 (actual)	3.4%
2012/13 (forecast)	4.0%
2013/14	4.0%
2014/15	4.0%
2015/16	5.7%
2015/10	5.7%

# Discussion

The annual return on equity will be lower in a project's early years and will rise over time, particularly once debt is retired. Columbia Power also has a significant amount of equity for the investment in the Waneta Expansion, which will not earn a return until 2015.

# **OBJECTIVE 3.3** EBITDA

# Strategy

EBITDA is "Earnings Before Interest, Taxes, Depreciation and Amortization." It is a measure of operating cash flow. EBITDA focuses on returns more directly influenced by management and excludes those factors over which management has limited or no influence.

EBITDA is particularly effective as a means to compare the performance of the joint ventures year over year. The strategy is to effectively manage and grow EBITDA year over year.

# **Benchmark**

External benchmarks are difficult to identify because Columbia Power—as a small, unregulated commercial Crown working within a large regulated environment—is unique. As an entity, in terms of financial benchmarks, Columbia Power's corporate characteristics are somewhere between an independent power producer and a large regulated utility. The growth targets below are therefore based on Columbia Power's historic and forecast performance.

#### Target

A growth in EBITDA in fiscal year.

# **Benchmark**

EBITDA	
Targets (\$ in thousands)	

2011/12 (actual)	14,437
2012/13 (forecast)	18,050
2013/14	19,227
2014/15	20,012
2015/16	29,531

# Discussion

EBITDA was lower in 2011/12 due to an unanticipated operational incident in June 2011 at Brilliant Expansion which resulted in an unplanned outage, and Arrow Lakes Power Corporation bond redemption costs. There was a second unanticipated operational incident in June/July of 2012. However, this was within budgeted allowances and is not expected to cause Columbia Power to miss targeted EBITDA. EBITDA is anticipated to grow moderately until 2015/16 when Waneta Expansion commences operation, after which growth will be substantial.

# **OBJECTIVE 3.4** FREE CASH FLOW

# Strategy

Free cash flow is the amount of cash a company has left over after it has satisfied its obligations, including sustaining capital investments and debt service. Free cash flow is an important measure in determining availability of dividend payments. On a long-term basis, free cash flow is also a measure of funds available for future capital planning investments. The strategy is to maximize free cash flow to meet the organization's strategic objective to develop commercially viable power projects.

# Benchmark

External benchmarks are difficult to identify because Columbia Power—as a small, unregulated commercial Crown working within a large regulated environment—is unique. As an entity, in terms of financial

benchmarks, Columbia Power's corporate characteristics are somewhere between an Independent Power Producer and a large regulated utility. The cash flow targets below are therefore based on Columbia Power's historic and forecast performance.

# **Target**

The targets are described in the table below. The material positive cash flow in 2011/12 reflects the \$350 million ALPC Series B bond issue, redemption of Series A bonds and subsequent payment of special dividend to ALPC shareholders (Columbia Power and CBT Arrow Lakes Power Corp.) The material negative cash flow during the years 2012/13—2013/14 reflects the significant cash outlay to fund Columbia Power's 32.5% interest in the construction of the Waneta Expansion Project. These will be offset by significant positive cash flow in the years following commissioning in 2015.

when required as provided in the Corporation's Agency

#### **Benchmark**

Consistent with target below				
Targets (\$ in thousands)				
2011/12 (actual)	93,731			
2012/13 (forecast)	(58,297)			
2013/14	(24,084)			
2014/15	2,417			
2015/16	13,084			
•••••	••••••	•••••••••••••••••••••••••••••••••••••••		

# Goal 4

# Approval and Implementation of the Strategic Plan

Columbia Power develops and operates power projects in the Columbia Basin and is managing the construction of the Waneta Expansion, which is scheduled for completion in 2015. As set out in the Government's Letter of Expectations, Columbia Power is seeking final approval of the Columbia Power Strategic Plan 2012-2017 from the Shareholder, following which Columbia Power will implement the strategy, report to Government on its progress, and seek approval from Treasury Board

Agreement with the Province.

The proposed Strategic Plan contemplates the period up to and after the completion of Waneta Expansion. It is intended to support the Government's mandate to enable job creation and build a stronger economy.

The proposed Strategic Plan has the following objectives:

- Finishing Waneta Expansion—safely, on-time and onbudget, while meeting our environmental, First Nations and community commitments.
- Reinvesting some of the income from Columbia Power's existing facilities (and from Waneta once it is finished), in collaboration with BC Hydro, in new hydro generation projects in or near the Columbia Basin.
- Optimizing the performance of our existing facilities to continue to generate reliable returns.
- Continuing to use some of Columbia Power's share of the income from the facilities to pay dividends to the shareholder, the Province of British Columbia.

# **OBJECTIVE 4.1** FINAL APPROVAL OF THE STRATEGIC PLAN

# Strategy

In late 2012/2013, Columbia Power presented its proposed strategy to Government and embarked on a public consultation program with local governments, stakeholders, broader community and First Nations. The strategic direction reflects the initial views of provincial and local government representatives, stakeholders, First Nations and other third parties. We anticipate that a decision on the proposed Strategic Plan will be made in 2012/13, following which we will pursue the strategies contemplated by the plan.

### **Benchmark**

Final approval and implementation of 2012-2017 Strategic Plan

# **Targets**

2011/12 (actual)	Strategic Planning Workshop conducted with Board
2012/13 (forecast)	Submit proposed Strategic Plan to government for final approval
	Conduct consultation program on proposed strategy with local government, stakeholders, the broader community and First Nations
2013/14	Implement the Strategic Plan
2014/15	Review of the Strategic Plan
2015/16	Review of the Strategic Plan

# Discussion

Approval of the Strategic Plan is important as it provides Columbia Power's Board and management with the accountability and authority to make resource decisions (both human and capital resources) that impact its ability to maintain and grow its business. The strategy and associated annual operating plans are structured to ensure that Columbia Power collaborates with partners whenever feasible and invests prudently and in a manner that reflects the risks inherent in the development of long lead time capital intensive projects. At risk capital will be prudently managed and development funding decisions will only be made if the risk associated with each project is thoroughly understood and accepted by the partners.

# **OBJECTIVE 4.2** DEVELOPMENT OF NEW PROJECTS

# Strategy

Consistent with the proposed Strategic Plan, engage in community consultation, and define and develop power projects, working closely with the Ministry of Energy, Mines and Natural Gas and key third parties.

### **Benchmark**

Power Projects defined and approved for development by 2013/14

# **Targets**

2011/12 (actual)	Completed preliminary work for proposed project
2012/13 (forecast)	Commence early activities for proposed project and early work for possible additional proposed project, subject to approval of proposed Strategic Plan; engage in preliminary community consultation program on proposed Strategic Plan and projects
2013/14	Continue activities for new project(s)—subject to approval of proposed Strategic Plan
2014/15	Continue activities for new project(s)—subject to approval of proposed Strategic Plan
2015/16	Continue activities for new project(s)—subject to approval of proposed Strategic Plan

# Discussion

This measure is necessarily high level, pending a Government decision on the proposed Strategic Plan. Several projects will be considered for development, subject to this approval. For any projects approved, decision points will be defined and appropriate levels of approval will be obtained prior to entering each phase of project development.



# **SUMMARY FINANCIAL OUTLOOK**

# CONSOLIDATED STATEMENT OF INCOME FORECAST

\$ in thousands

	2011/12	2012/13	2013/14	2014/15	2015/16
	Actual	Forecast			
OPERATING REVENUE					
Services Agreement	1,833	2,273	2,268	1,940	861
	1,833	2,273	2,268	1,940	861
Income (loss) from equity accounted investees:					
Brilliant Power Corporation	9,638	9,939	10,408	10,845	11,239
Brilliant Expansion Power Corporation	7,786	9,300	9,880	9,809	10,037
Arrow Lakes Power Corporation	(2,066)	(738)	(636)	136	1,219
Waneta Expansion Power Corporation	944	997	1,054	1,113	1,176
Waneta Expansion Limited Partnership	-	-	-	-	8,172
	16,302	19,498	20,706	21,903	31,843
T. 10	10.125	04 774	22.274	22.042	22.704
Total, Operating Revenue	18,135	21,771	22,974	23,843	32,704
OPERATING EXPENSE					
Staff and Office Costs (Net of Recoveries):					
Salaries and Benefits	2,555	2,612	2,548	2,588	2,043
Office Costs	599	550	621	645	511
Community Sponsorship	84	85	85	85	85
Grants in lieu	460	474	493	513	534
Grants in neu	3,698	3,721	3,747	3,831	3,173
	3,050	37, 21	3,7 17	3,03 !	3,1,73
EBITDA	14,437	18,050	19,227	20,012	29,531
	·				
AMORTIZATION & FINANCING					
Interest expense	1,130	1,133	1,133	1,133	1,133
Amortization of Property, Plant & Equipment	603	472	437	246	226
Less: Interest revenue	1,982	1,296	749	695	824
	(249)	309	821	684	535
NET INCOME	14,686	17,741	18,406	19,328	28,996

# **Key Assumptions**

Key assumptions affecting the forecast's performance measures targets are as follows:

- Operating cost inflation, including water rental increases is approximately 2% per year.
- Columbia Power's dividends to the Province remain at \$2.0 million per year.
- Adequate resources are available to the Corporation to achieve its forecast performance.
- Plant availability is as forecast. The Waneta Expansion Project will be built on-schedule and on-budget.
- Capital and operating needs of the assets under management are as forecast.
- Other project development anticipates final approval of the Strategic Plan by the Province. No capital spending on project development occurred in 2012/13. The provision for capital spending will be utilized in the event the Strategic Plan is approved and indications of the viability of the projects are positive.

# **IFRS differences:**

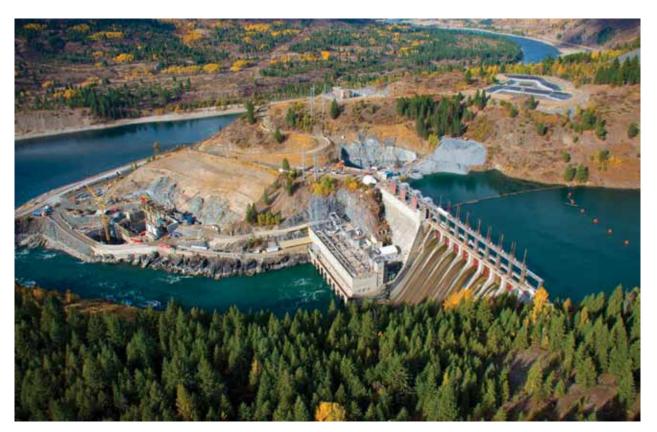
- The 2012/13 Service Plan was prepared considering Columbia Power's knowledge of International Financial Reporting Standards (IFRS) impact at the time it was prepared. Depreciation estimates for property, plant and equipment for ALPC and BEPC were calculated on the basis of that knowledge. Further work was carried out in the preparation of Columbia Power's 2011/12 audited consolidated financial statements that resulted in changes to those estimates that are reflected in the 2013/14 Service Plan.
- The 2012/13 Service Plan did not include a consolidation elimination entry for 32.5% of interest income from the promissory note that WELP issued to WEPC. The 32.5% represents Columbia Power's interest in WELP. Further work was carried out in the preparation of Columbia Power's 2011/12 audited consolidated financial statements that resulted in this elimination entry being reflected in the 2013/14 Service Plan.

# Other differences:

• Market power sales for Brilliant Expansion have increased in 2013/14 and subsequent years as a result of entering into a 5-year sales agreement for energy and capacity with FortisBC.

# **Financial Outlook:**

Columbia Power's EBITDA and net income will increase significantly after 2015/16 due to a full year of income
from the Waneta Expansion Limited Partnership and a new power sales agreement between BC Hydro and
Arrow Lakes Power Corporation.



Aerial view of the Waneta Expansion Project, Fall 2012

# **RISK FACTORS AND SENSITIVITIES**

Columbia Power's assets provide stable streams of power and revenue. Factors that could affect the future rate of return include: payments to government, capital and operating needs of the assets under management, and regulatory and/or legislative changes imposed on existing assets.

Future dividends will be determined based on annual earnings, working capital requirements, contingency reserves, reserves for future sustaining capital requirements, and new power project investment opportunities.

The following table presents an analysis of the primary risks that Columbia Power faces and the strategies being undertaken to address these risks.

# RISK FACTORS AND SENSITIVITIES

	Issue/Impact	How Managed
Waneta Expansion Project On-Schedule	Failure to adhere to construction schedule would negatively impact project revenues.	The Design-Build Contract specifies the Substantial Completion Milestone Date with incentives for early completion and liquidated damages for late completion.
OII-3CHEdule		<ul> <li>Columbia Power, as the Owner's Representative, with experience in similar design-build projects, is overseeing the project. To date the Waneta Expansion Project remains on-schedule.</li> </ul>
Waneta Expansion Project On-budget	Failure to adhere to budget would negatively impact project financials.	<ul> <li>The majority of the construction cost risk is transferred to the Design-Build Contractor with performance-based penalties and incentives.</li> </ul>
On-budget		<ul> <li>Columbia Power, as the Owner's Representative, with experience in similar design-build projects, is overseeing the project. To date, the Waneta Expansion Project remains on-budget.</li> </ul>
Waneta Expansion Transmission Line (plant to Selkirk Substation)	Failure to adhere to budget and schedule would negatively impact project financials.	<ul> <li>On-going interaction with landowners and completion of transmission line corridor site preparation and clearing in 2012/13. Construction of transmission line and interconnection to Selkirk Substation in 2013/14.</li> </ul>
Species at Risk Act Implementation	Implementation of the prohibitions and critical habitat protection could impact plant operations and	<ul> <li>Columbia Power continues to work with the Department of Fisheries and Oceans and other hydro owners on permitting solutions for hydro facilities.</li> </ul>
		<ul> <li>Columbia Power conducts studies to understand the impacts of facility operations on listed or potentially listed species and their habitat.</li> </ul>
		• Columbia Power participates in white sturgeon recovery planning to manage the impact of recovery planning on facility operations.
Regulatory Risk	Regulatory and/or legislative changes can impact existing assets.	Columbia Power proactively intervenes in regulatory proceedings as required to protect its interests and monitors regulatory and legislative developments, and provides input into the development of legislation relevant to Columbia Power's interests. A focus in 2013/14 will be working through industry associations with DFO on new regulations associated with the changes to the Fisheries Act.

	Issue/Impact	How Managed
Plant Reliability	Plant availability has a large impact on forecast revenues. Unanticipated Operations and Maintenance cost increases and capital requirements will impact net revenues.  If ALH plant outage factor were to increase by one percentage point, revenues and net income would decline by \$377,000 in 2013/14.  If BRX plant outage factor were to increase by one percentage point, revenues and net income would decline by \$368,000 in 2013/14.	<ul> <li>Plant outage risk for the Brilliant Generating Station is transferred to FortisBC as the power purchaser/plant operator.</li> <li>ALH and BRX plant management, operations and maintenance is performed under long-term agreement by FortisBC Generation with oversight and due diligence performed by Columbia Power.</li> <li>ALH and BRX reliability risks are identified through monitoring programs and annual planned inspections. Non-routine and capital projects are developed and implemented to effectively mitigate the risks. In response to efforts by government to control cost, we have reduced slightly our non-routine maintenance and our allowance for unplanned outages. Should our monitoring programs reveal issues that affect reliability, they will be addressed.</li> <li>All power projects carry business interruption, property and liability insurance, subject to deductibles including a 30-day</li> </ul>
Attracting and Maintaining Key Staff	Columbia Power requires the organizational capacity to effectively manage all existing facilities and the Waneta Expansion and all new projects.	waiting period for business interruption.  Columbia Power has established HR strategies including: competitive compensation and benefits plans, a performance management program, and training and development opportunities to attract and retain key staff.
First Nations and Community	Relationships with First Nations and local communities will be maintained to ensure Columbia Power's social licence in Region.  Expectations of government are understood.	<ul> <li>First Nations and local communities are the focus of Columbia Power's Stakeholder Relations activities and are regularly engaged.</li> <li>Community Benefits Agreements with key First Nations groups are executed and adhered to.</li> <li>Community sponsorship program has been established to support community and First Nations activities and events.</li> <li>A Community Impact Management Committee was established for each project and monthly meetings were held with key stakeholders and local government representatives.</li> <li>Regular participation in community activities, events and local government conferences and ongoing liaison with First Nations and key stakeholders.</li> <li>Actively participate in provincial and regional government forums.</li> </ul>
Geographical Challenge	Maintaining connections with government and industry.	<ul> <li>Given the location of Columbia Power's head office in the Kootenay region, Columbia Power staff maintain regular contact with representatives of government by holding regular conference calls and in-person meetings on a quarterly and asrequired basis.</li> <li>Ministry of Energy, Mines and Natural Gas staff are kept apprised of developments with Columbia Power's projects and advised of potential issues and/or challenges.</li> <li>Regular liaison occurs with partners and industry representatives via one-on-one discussion and collaboration and participation in associations such as the Canadian Hydropower Association and Canadian Electricity Association.</li> </ul>

# PROFORMA CONSOLIDATED BALANCE SHEET

	2012	2013	2014	2015	2016
ASSETS					
Working Capital (Current Assets-Current Liabilities)	138,916	80,619	56,535	58,952	72,036
Non-current Assets					
Investment in equity accounted investees	308,686	383,101	420,243	431,273	437,292
Property, plant and equipment	1,586	1,218	936	848	783
Investment in new projects	-	-	3,650	7,650	15,650
	310,272	384,319	424,829	439,771	453,725
Total Assets	449,188	464,938	481,364	498,723	525,761
LIABILITIES AND SHAREHOLDER'S EQUITY					
Long-Term Debt	20,000	20,000	20,000	20,000	20,000
Equity					
Contributed surplus	276,065	276,065	276,065	276,065	276,065
Retained earnings	153,123	168,873	185,299	202,658	229,696
	429,188	444,938	461,364	478,723	505,761
Total Liabilities & Shareholder's Equity	449,188	464,938	481,364	498,723	525,761

# CONSOLIDATED CAPITAL SPENDING (FORECAST)

\$ in thousands

	2011/12	2012/13	2013/14	2014/15	2015/16
	Actual	Forecast			
Arrow Lakes Power Corporation	289	312	131	258	811
Brilliant Expansion Power Corporation	366	556	250	341	1,099
Brilliant Power Corporation	910	1,049	1,204	991	1,002
Waneta Expansion	61,320	76,790	38,631	12,350	4,059
Columbia Power Corporate	72	105	155	158	161
Provision for Future Development	-	-	3,650	4,000	8,000
Total	62,957	78,812	44,021	18,098	15,132

# Liquidity and Sources of Capital

In 2011/12, Columbia Power implemented a Financing Plan for the Waneta Expansion Project through its share of the \$350 million Series B bonds issue by Arrow Lakes Power Corporation and supplemented by Columbia Power borrowing \$20 million from CBT Energy and utilizing internal cash flows. Columbia Power has created a \$30 million contingency reserve to cover risks related to Waneta Expansion construction and/or operating assets. In addition, Columbia Power has established an investment reserve for investment in other power project development. This Plan was approved by the Minister of Finance in December 2010.

All other cash flow requirements are met by internal cash flows.

# ARROW LAKES POWER CORPORATION STATEMENT OF INCOME FORECAST (IFRS)

	2011/12	2012/13	2013/14	2014/15	2015/16
	Actual	Forecast			
REVENUES					
Power Sales to BC Hydro	35,344	35,696	36,208	37,370	38,447
Grants-In-Lieu Recovery	279	294	300	306	312
Total Revenues	35,623	35,990	36,508	37,676	38,759
OPERATING EXPENSES					
Operations & Maintenance	2,792	3,886	3,777	3,166	3,341
Administration/Management	1,247	1,335	1,360	1,389	1,293
Insurance	430	465	475	485	495
Environmental	287	317	382	398	414
Grants-In-Lieu of Property Taxes	279	294	300	306	312
Water Rental	4,526	4,621	4,718	4,817	4,918
Other Professional Services	212	186	190	194	198
Total Operating Expenses	9,773	11,104	11,202	10,755	10,971
EBITDA	25,850	24,886	25,306	26,921	27,788
AMORTIZATION & FINANCING					
Amortization of Power Sales Agreement	1,903	1,904	1,890	1,890	546
Amortization of Power Facility	5,528	5,506	5,522	5,529	5,542
Financing Expense - Series A	768	-	-	-	-
Bondholder Redemption Costs	2,837	-	-	-	-
Interest - Series B	19,306	19,306	19,306	19,306	19,306
Financing Expense - Series B	173	121	121	121	121
Less: Interest Revenue	534	476	261	198	164
Total Amortization & Financing Expenses	29,981	26,361	26,578	26,648	25,351
NET INCOME (Loss)	(4,131)	(1,475)	(1,272)	273	2,437

# BRILLIANT POWER CORPORATION STATEMENT OF INCOME FORECAST (IFRS)

	2011/12	2012/13	2013/14	2014/15	2015/16
	Actual	Forecast			
REVENUES					
Lease Revenue:					
Brilliant Plant Capital Charges	26,711	27,079	27,494	27,946	28,290
Brilliant Terminal Station Capital Charge	2,233	2,207	2,171	2,139	2,093
Market Sales (Reg U/G)	1,279	1,439	1,439	1,439	1,439
Operating Revenue	10,677	11,151	12,348	12,606	12,870
Total Revenues	40,900	41,876	43,452	44,130	44,692
OPERATING EXPENSES					
Operations & Maintenance	1,821	1,928	2,931	2,992	3,055
Administration/Management	816	1,075	955	975	995
Insurance	405	424	433	442	451
Property Tax	2,018	2,301	2,349	2,398	2,448
Water Rentals	5,639	5,748	5,869	5,992	6,118
Other Professional Services	275	281	287	293	299
Total Operating Expenses	10,974	11,757	12,824	13,092	13,366
EBITDA	29,926	30,119	30,628	31,038	31,326
AMORTIZATION & FINANCING EXPENSES					
Interest on Series A Bonds	6,735	6,506	6,256	5,982	5,684
Interest on Series B Bonds	1,510	1,449	1,384	1,314	1,240
Interest on Series C Bonds	2,253	2,145	2,031	1,910	1,782
Amortization of Rights	67	60	60	60	60
Amortization of Debt Issue Costs	258	207	207	207	207
Less: Interest Revenue	173	125	125	125	125
Total Amortization & Financing Expenses	10,650	10,242	9,813	9,348	8,848
NET INCOME	19,276	19,877	20,815	21,690	22,478

# BRILLIANT EXPANSION POWER CORPORATION STATEMENT OF INCOME FORECAST (IFRS)

	2011/12	2012/13	2013/14	2014/15	2015/16
	Actual	Forecast			
REVENUES					
Power Sales - BC Hydro	23,667	26,032	26,584	26,872	27,812
Power Sales - Market	2,085	2,619	3,636	3,570	3,355
EcoEnergy Grant	4,427	4,427	4,427	4,427	4,427
Grants-In-Lieu of Property Tax Recovery	181	185	189	193	197
Total Revenues	30,360	33,263	34,836	35,062	35,791
EXPENSES					
Operations & Maintenance	3,023	3,543	3,478	3,802	3,997
Power Purchases	1,279	1,439	1,439	1,439	1,439
Administration/Management	1,771	1,579	1,527	1,559	1,592
Insurance	340	368	376	384	392
Environmental	185	377	452	387	347
Grants-In-Lieu of Property Taxes	181	185	189	193	197
Water Rentals	2,374	2,100	2,446	2,497	2,550
Other Professional Services	344	160	163	166	170
Total Operating Expenses	9,497	9,751	10,070	10,427	10,684
EBITDA	20,863	23,512	24,766	24,635	25,107
AMORTIZATION & FINANCING EXPENSES					
Amortization of Expansion Rights	523	523	523	523	523
Amortization of Power Facility	4,477	4,504	4,532	4,544	4,561
Interest expense	406	-	-	-	-
Less: Interest Revenue	113	115	50	50	50
Total Amortization & Financing Expenses	5,293	4,912	5,005	5,017	5,034
NET INCOME	15,570	18,600	19,761	19,618	20,073

# Glossary

# **Benchmarking**

A measured "best in class" achievement that is used as a reference or measurement standard for comparison and is recognized as the standard of excellence for a specific business process.

# **Bond rating**

A rating assigned to bonds based on the probability of the issuing firm's default. Those bonds with the lowest default probability have the highest rating and generally carry the lowest interest rates.

# **Canadian Electricity Association (CEA)**

An association of industry participants involved in the generation, transmission, distribution and sales of electricity in Canada.

# Capacity

The maximum power that a generating station can supply, usually expressed in megawatts.

# Debt service coverage ratio (DSCR)

Earnings before interest, depreciation and taxes, divided by debt service payments (debt principal and interest payments) during the year.

# **Department of Fisheries and Oceans (DFO)**

A federal department that supports sustainable use and development of Canada's waterways for the management of fisheries and federal waters.

# **Design-build contract**

A contract between the owner and a contractor for the design, construction and purchase of equipment, and including commissioning of a power project, in accordance with the Owner's technical specifications.

# **Entitlement agreement**

An agreement to include a hydro project in the larger hydro system for the purposes of optimizing system power generation, whereby the project owner receives a fixed amount of power.

# Limited-recourse project debt

Debt that limits the security available to debt holders in the event of default to only those assets of the debt issuer. The debt is not guaranteed by another party.

# Megawatt (MW)

1 million watts; 1,000 kilowatts. A unit commonly used to measure both the capacity of generating stations and the rate at which energy can be delivered.

# Megawatt-hour (MWh)

Equal to 1,000 kilowatt-hours. An average household in British Columbia uses about 10,000 KWH (10 MWH) of electricity per year.

# Operation, maintenance and administration (OMA)

The cost of operating and maintaining power plants, along with the related administration costs. OMA does not include amortization, taxes, interest or insurance.

# **Owner's Representative**

The Owner's Representative is designated by the Owner to act as a single point of contact for the Contractor with respect to all matters under the Design-build contract and oversees the design and construction of the work.

# **Return on investment**

Income available to shareholders as a percentage of their investment.

# Water rental

A royalty collected by the Province of British Columbia for the use of water.

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