

Report 8: October 2011

BC HYDRO:
THE EFFECTS OF RATE-REGULATED ACCOUNTING

www.bcauditor.com



OFFICE OF THE
Auditor General
of British Columbia



OFFICE OF THE
Auditor General
of British Columbia

Location:

8 Bastion Square
Victoria, British Columbia
V8V 1X4

Office Hours:

Monday to Friday
8:30 am – 4:30 pm

Telephone: 250-419-6100

Toll free through Enquiry BC at: 1-800-663-7867
In Vancouver dial 604-660-2421

Fax: 250-387-1230

Email: bcauditor@bcauditor.com

Website:

This report and others are available on our website, which also contains further information about the Office: www.bcauditor.com

Reproducing:

Information presented here is the intellectual property of the Auditor General of British Columbia and is copyright protected in right of the Crown. We invite readers to reproduce any material, asking only that they credit our Office with authorship when any information, results or recommendations are used.



OFFICE OF THE
Auditor General
of British Columbia

8 Bastion Square
Victoria, British Columbia
Canada V8V 1X4
Telephone: 250-419-6100
Facsimile: 250-387-1230
Website: www.bcauditor.com

The Honourable Bill Barisoff
Speaker of the Legislative Assembly
Province of British Columbia
Parliament Buildings
Victoria, British Columbia
V8V 1X4

Dear Sir:

As mandated under Section 11 of the *Auditor General Act*, I have the honour to transmit to the Speaker of the Legislative Assembly of British Columbia my 2011/2012 Report 8: *BC Hydro: The Effects of Rate-Regulated Accounting*.

Each year, BC Hydro produces independently audited financial statements, prepared in accordance with Canadian generally accepted accounting principles (GAAP). This report speaks to the financial condition of BC Hydro, as reflected in its audited financial statements but with further analysis.

As allowed under Canadian GAAP, BC Hydro uses rate-regulated accounting in its financial statements. In effect, rate-regulated accounting allows BC Hydro to defer to future years certain expenses that would normally be recorded in the current year's financial statements. As of March 31, 2011, a net total of \$2.2 billion in expenses had been deferred and, by government's own estimate, the balance is predicted to grow to nearly \$5 billion by 2017.

There does not appear to be a plan to reduce the balance of these accounts, let alone halt their growth. Rate-regulated accounts must be managed carefully. If overused, rate-regulated deferrals can mask the true cost of doing business, distort the financial condition of an enterprise and place undue burdens on future ratepayers.

However, Canada will be adopting international accounting standards (IFRS) in the coming year, which does not allow for deferral accounts. As such, expenses that are currently being deferred under rate regulation would be shown each year, bringing to the forefront the financial consequences of management decisions and highlighting the challenges that lie ahead. Unfortunately, though, government is requiring BC Hydro to adopt part of an American accounting standard that allows rate regulation, abandoning the transparency that will be required by Canadian GAAP. It is my hope they will reconsider.

John Doyle, MAcc, CA
Auditor General

Victoria, British Columbia
October 2011

TABLE OF CONTENTS

Auditor General’s Comments	5
Summary of Recommendations	7
Response from the Ministry of Energy and Mines	8
Detailed Report	9
<i>Financial Management is Important</i>	9
<i>Financial Management and Financial Transparency are Being Confused</i>	10
<i>Intergenerational Impacts</i>	13
<i>Options</i>	13
<i>Decisions Need To Be Supported by Transparent Financial Reporting</i>	14
Looking Ahead	15
Appendix A – A Variety of Rate-Regulated Deferral Accounts Have Been Created	16
Appendix B – BC Hydro’s Use of Rate-Regulated Deferrals Exceeds Other Comparable Utilities	19

AUDITOR GENERAL'S COMMENTS



JOHN DOYLE, MAcc, CA
Auditor General

LAST YEAR I determined that a review of BC Hydro's accounting practices, particularly those related to rate regulation, was in order. Rate-regulated accounting is explained more fully in this report, but in short it involves deferring expenses and revenues to future years in order to "smooth out" the effects of unexpected costs or windfall profits. Currently, BC Hydro's financial statements contain a net total of \$2.2 billion in deferred costs, to be expensed in future years. By government's own estimate, the balance of rate-regulated deferrals is already large and is projected to balloon to almost \$5 billion by 2017.

Around the time my staff began their work, which was conducted in accordance with section 11 (8) of the *Auditor General Act*, government commissioned its own financial and administrative review of the Crown corporation. As a result, I deferred the release of my report to allow for the completion of government's review. This permitted me to tailor my comments accordingly and avoid duplicating the review's recommendations, on which government and BC Hydro had already committed to act. On August 11 this year, *Review of BC Hydro, June 2011* was released.

Government's report noted a number of challenges for BC Hydro, and made over 50 recommendations regarding its operations. The report also presented policy options and suggestions – something that is outside of an auditor's mandate. Indeed, it has not been my intention to intrude into the rate-setting discussion, as that is the responsibility of others.

Rate-regulated deferrals were identified as an issue, and discussed in government's report. I think government's discussion of the effects of rate-regulated accounting provided useful information for understanding the topic; however, two significant concerns remain for me. First, growth of deferral accounts cannot continue indefinitely. I am concerned that there does not appear to be a plan to reduce the balance of these accounts, let alone halt their growth. Rate-regulated accounts must be managed carefully. If overused, rate-regulated deferrals can mask the true cost of doing business, distort the financial condition of an enterprise and place undue burdens on future ratepayers.

My second concern is that discussions regarding the disposition of deferral accounts should be supported by a comprehensive understanding of BC Hydro's financial condition. In any organization, annual financial statements are the cornerstone of management's accountability for the resources entrusted to them. Like all Crown corporations in British Columbia, BC Hydro produces independently audited annual financial statements prepared in accordance with Canadian generally accepted accounting principles (GAAP). BC Hydro's independent auditors provided an unqualified opinion that the consolidated financial statements for the year ended March 31, 2011 were fairly presented in accordance with Canadian GAAP.

However, Canadian GAAP is in a process of transition. Soon, business enterprises such as BC Hydro will be required to report under International Financial Reporting Standards (IFRS). Of particular interest in relation to BC Hydro is that, effective next year, the deferrals permitted by rate-regulated accounting will no longer be allowed. In my view, the increased transparency required by IFRS is very positive, particularly in relation to BC Hydro, because it brings to the forefront the consequences of financial management decisions and highlights the challenges that lie ahead.

Unfortunately, government has taken a different position. The *Budget Transparency and Accountability Act* was amended in the 2010 session to allow for departures from GAAP, if authorized by Treasury Board via regulation. In July of this year, Treasury Board issued the Government Organization Accounting Standards Regulation, which requires BC Hydro to adopt one part of an American accounting standard that allows rate regulation, thereby avoiding the transparency required under Canadian accounting standards – transparency that is essential to understanding BC Hydro's financial condition as a standalone enterprise.



John Doyle, MAcc, CA
October 2011

AUDIT TEAM

Russ Jones
Assistant Auditor General

Michael Macdonell
Assistant Auditor General

Brent Blackhall
Senior Manager

Kenneth Ryan-Lloyd
Manager

Ben Hurd
Manager

SUMMARY OF RECOMMENDATIONS

WE RECOMMEND THAT GOVERNMENT:

- 1** determine, at the earliest opportunity, how BC Hydro will recover the net deferred costs in its regulatory accounts.
- 2** prescribe that the annual financial statements for BC Hydro be prepared fully in accordance with Canadian generally accepted accounting principles.

THE MINISTRY OF ENERGY AND MINES

(Ministry) appreciates the Auditor General's report on the Effects of Rate regulated Accounting (Report). The Report complements the recent Review of BC Hydro (Review) undertaken at the direction of the Premier and Minister of Energy and Mines. Recommendations from both the Report and Review will be considered by BC Hydro in preparing its amended revenue requirements application which will be submitted at the end of November 2011 to the BC Utilities Commission (BCUC) and reviewed in an open, transparent and public hearing process.

As a result of the Review, the Ministry has already been working with BC Hydro on the projected growth of its regulatory accounts. BC Hydro has three general categories of regulatory accounts. The first captures variances in key cost drivers between what was forecast when rates were set, and what actually occurs. These key drivers include energy costs, which fluctuate based on annual variances in inflows into BC Hydro's reservoirs, and income from electricity trade. Over time, it is expected these regulatory assets and liabilities will generally average out. Should there be a large accumulation of amounts owing from future ratepayers, a rate rider has been established to reduce these balances and ensure current ratepayers are not unduly transferring costs to future ratepayers. A rate rider of 2.5% is built into current rates and will contribute approximately \$100 million per year, in addition to the averaging effect of forecast variances, to lowering these account balances.

The second category of deferral accounts includes capital-like accounts that are established to match the costs of assets and programs to the beneficiaries. In this category are demand-side management programs where costs are recovered over the life of program savings, and costs associated with major projects such as Site C and the Smart Metering and Infrastructure Program, where recovery commences when the asset is brought into service and costs

are matched over the projected life of the assets consistent with BC Hydro's amortization schedules. Capital-like accounts are the largest contributor to projected growth in regulatory accounts over the next five years (approximately 80%).

The third category of regulatory accounts are generally off-sets to provisions, such as First Nations negotiations and settlements and environmental remediation provisions, or by the transition to International Financial Reporting Standards and the impact this will have on accounting for post-employment benefits. These provisions represent significant one-time adjustments for costs which should be recovered from ratepayers in future periods. Setting up offsetting regulatory accounts provides for recovering the related costs over a reasonable time period, which also more closely reflects the actual payment of the related liabilities.

The retention of rate regulated accounting in British Columbia is a policy decision that the government has made to maintain rate stability, and one that is also being made in other jurisdictions. In Ontario, Hydro One has adopted full US GAAP, including rate regulated accounting; others include Fortis Inc. with operations in British Columbia and Alberta, Enbridge Gas Distribution Inc., and TransCanada Corporation. The implications of rate regulation will continue to be transparently disclosed in the audited financial statements of both BC Hydro and the Province (see Note 4 in BC Hydro's 2010/11 Annual Report and Note 37 in the Notes to Consolidated Summary Financial Statements in the 2010/11 Public Accounts).

FINANCIAL MANAGEMENT IS IMPORTANT

FINANCIAL MANAGEMENT is concerned with the planning, administration and control of financial resources. This includes decisions regarding cash flows, investments, debt levels and repayment terms and, in the case of a utility, the rates charged to customers. Financial management decisions are focused on the viability of an enterprise to ensure, among other things, that:

- ♦ there is sufficient cash on hand to pay bills as they come due,
- ♦ the cost of borrowing is kept to a minimum,
- ♦ the return on investments is maximized, and
- ♦ there is sufficient income to pay dividends to shareholders and invest in the business over the long term.

Strong financial management is essential to any business enterprise. However, as a publicly owned utility, BC Hydro must follow directions from government regarding the rates it can charge customers, the rate of return it must earn on investment and the dividend it is required to pay to government – decisions that are at the core of financial management.

Rate Setting

Among the most important financial management decisions for BC Hydro are the rates it charges its customers. However, BC Hydro is a regulated enterprise. This means that BC Hydro is not free to adjust the rates it charges its customers when it requires additional revenue to cover its operating costs. BC Hydro must make an application to a regulatory authority to make rate changes, and must abide by the decision of that body.

In British Columbia the utility industry is regulated by the BC Utilities Commission (BCUC), which was created under the *Utilities Commission Act*. The BCUC is a provincial agency; government, through the Lieutenant-Governor-in-Council, appoints the BCUC commissioners, and the government sometimes gives special direction to the BCUC regarding the exercise of its powers and the performance of its duties.

Delivering power to consumers at competitive rates has been government policy. Government's review of BC Hydro recognized the economic benefits of keeping electricity costs as low as possible: "*BC Hydro is a significant asset to the province, having provided relatively low-cost power to the citizens of British Columbia for over 50 years. This has helped make B.C. an attractive place to live and a competitive place to do business.*" Accordingly, the report focused on options for minimizing the most recent proposal for a rate increase by BC Hydro.

This has limited the revenue available to BC Hydro. Regardless of the established rate, BC Hydro and the BCUC aim for stability in electricity rates so that charges to consumers are predictable: prices do not rise and fall with the natural volatility of the cost to BC Hydro of producing, or having to buy, a unit of electricity. BC Hydro's submissions to the BCUC are public, as are the hearings where they are considered, but can be hundreds of pages in length.

When BC Hydro has applied to the BCUC to have its rates approved, it has asked that certain types of costs or surpluses be eligible for deferral. BC Hydro first established a deferral account on March 30, 2000, to mitigate the impact of short-term volatility of revenues and expenses on ratepayers. This Rate Stabilization Account was created to ensure that BC Hydro could achieve the annual rate of return on equity required by government by transferring amounts to and from the account as needed depending on the required net income for the year.

In 2004 the Rate Stabilization Account was cleared out and government issued a regulation effective for 2005 and beyond that mandated the BCUC to allow BC Hydro to establish more specific deferral accounts as required. Since 2005, the balance in these new deferral accounts has grown from \$182 million to \$2.2 billion at March 31, 2011, and is comprised of 27 different accounts according to BC Hydro's most recent annual report (see Appendix A).

Rate of Return

Another feature of financial management at BC Hydro is that government requires it to earn a specified rate of return on government's investment in the utility. Provincial legislation requires the BCUC to ensure that BC Hydro's rates allow it to collect sufficient revenue in each fiscal year to enable it to achieve its target annual return on equity. The Province has established that the annual return for BC Hydro be equal to the pre-tax return on equity of the nearest private comparator utility (Terasen Gas – now part of Fortis BC) plus an annual premium up to fiscal 2012, and just equal to that comparator thereafter. For the year ended March 31, 2011, the target rate was 14.3%.

Dividends

In addition to meeting the required return on equity, BC Hydro is also required to pay a dividend to the Province (its only shareholder). The most recent dividend, accrued for the year ended March 31, 2011, was \$463 million.

As stated in government's review, "currently, BC Hydro's annual dividend payment to the Province [the shareholder] is equal to 85% of net income, providing the debt (80%) to equity (20%) ratio is maintained. In light of the desire to satisfy shareholders and prevent dividend cuts, publicly traded utilities will typically pay out at a level at which they deem sustainable over the long term. In comparison, government owned utilities are free to readjust their payout policy as necessary to meet joint objectives (government and utility). Delivering reliable, low-cost power is generally seen as more important than maximizing the return to the shareholder."

BC Hydro has been required to fulfil specific policy directions from government, such as for energy self-sufficiency, that have increased costs. This has presented BC Hydro with considerable challenges as it also worked to meet government's objectives for relatively low, stable rates. In the process of meeting these challenges, financial management principles and transparent financial reporting have become confused.

FINANCIAL MANAGEMENT AND FINANCIAL TRANSPARENCY ARE BEING CONFUSED

Financial management and public financial reporting have significantly different purposes. The purpose of public reporting is to serve the interests of transparency and public accountability by describing

objectively the results of financial management using an agreed-upon reporting framework. In our view, rate-regulated accounting as it is being practiced is not consistent with this objective. Not only does rate-regulated accounting obscure financial management decisions that have been made, it allows management (sanctioned by the regulator) to determine how results will be publicly reported rather than following objective standards of presentation.

For example, to achieve its target return on equity, BC Hydro needs revenues to exceed expenses by a certain amount each year. For the March 31, 2010 fiscal year the target return on equity of 13% assumed that budgeted revenues would exceed budgeted expenses, creating net income of \$402 million. However, at the end of the year actual expenses exceeded actual revenues, creating a loss of \$249 million before deferrals. To achieve the target return on equity, \$696 million in expenses were deferred. This resulted in a final net income of \$447 million, and a return on equity that was close to the desired target.

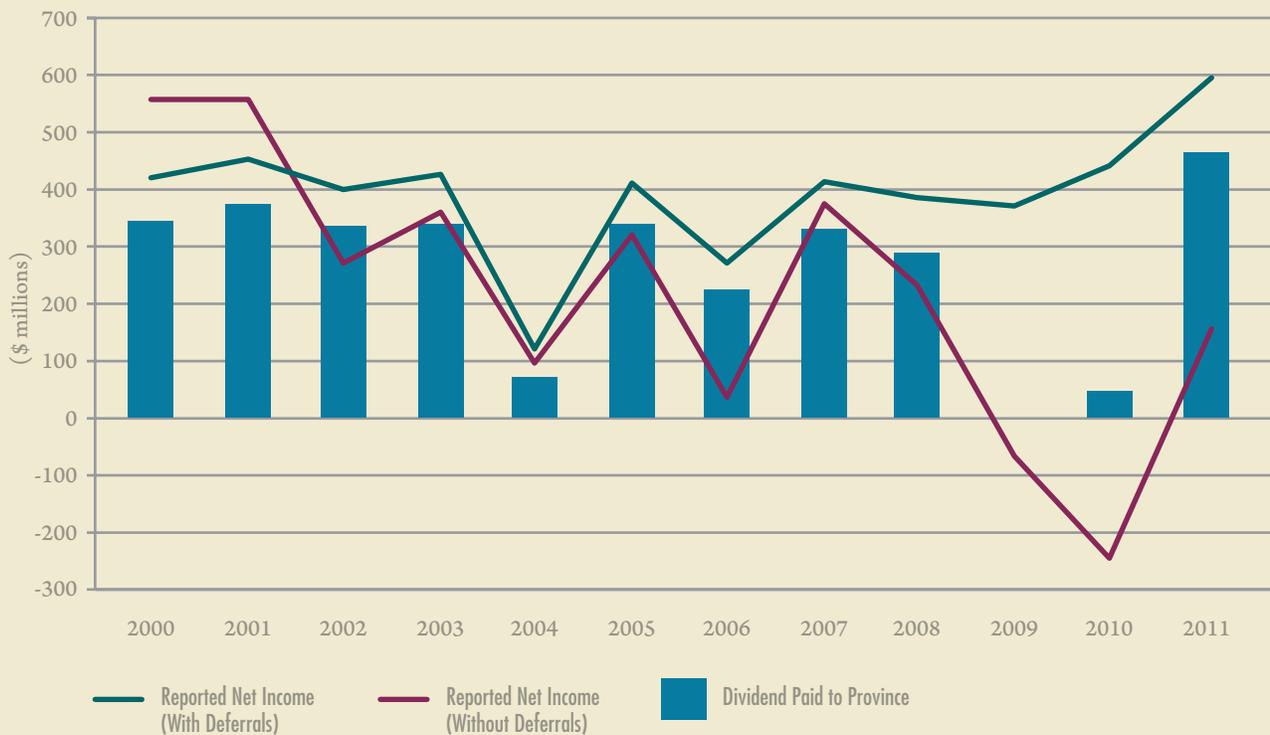
Expenses that would ordinarily be counted in calculating net income have been deferred to future years (allowed under rate-regulated accounting). While this practice is currently acceptable under Canadian generally accepted accounting standards (GAAP), it creates the appearance of profitability where none actually exists.

Essentially, accounting deferrals of this nature confuse the need to achieve legitimate policy objectives with the objectives of transparent financial reporting. BC Hydro's deferral accounts are an essential management tool for ensuring rate stability. Similar concepts are commonly used in the insurance industry to moderate the effect of fluctuating short-term returns on investments and year-to-year variations in claims history. However, these notional deferred balances are used for financial management purposes only. They do not impede fair and full financial reporting because they do not appear in the financial statements of these enterprises.

The impact of deferrals on BC Hydro's reported performance, and the public's ability to understand the Crown corporation's financial position, has been significant. As depicted in Exhibit 1, over the last decade the impact of deferrals has been to consistently increase BC Hydro's reported net income.

DETAILED REPORT

Exhibit 1: BC Hydro's net income relative to dividends paid to the Province of B.C., 2000–2011 (\$millions)



Source: Compiled by the Office of the Auditor General of British Columbia from BC Hydro's annual reports.

Higher reported income has required BC Hydro to pay higher dividends to its shareholder. When the effects of rate-regulated deferral accounting are removed, government collected a larger dividend than BC Hydro's net income without deferrals in 2002, 2005, 2006, 2008, 2010 and 2011.

DETAILED REPORT

Exhibit 2: Trends in retained earnings, 2000–2011 (\$millions)



Source: Compiled by the Office of the Auditor General of British Columbia from BC Hydro’s annual reports.

Deferral accounts have also had an impact on retained earnings. Retained earnings represent the financial resources that companies retain to reinvest in the business or pay down debt. They are increased by income, and reduced by losses and the payment of dividends to shareholders. As shown in Exhibit 2, BC Hydro’s reported retained earnings have shown a steady increase over the last decade. However, when the effects of rate-regulated deferrals are taken into account, the opposite is true. If the trend continues as predicted in government’s review, BC Hydro’s financial statements will report negative equity under Canadian GAAP – potentially challenging the “going concern” assumption that underlies BC Hydro’s financial reporting.

While retained earnings before deferrals have been declining, debt has been growing. BC Hydro’s debt has increased from \$7.5 billion in 2006 to \$11.6 billion as at March 31, 2011. Exhibit 3 shows the declining financial condition playing out since 2006.

Interest

When a company obtains financing from an external lending source, an interest cost is usually incurred. Where such costs are related to the routine operations of the enterprise, generally speaking they are recorded in the financial records as an expense in the period in which the cost is incurred.

BC Hydro applies interest to 14 of its 27 deferral accounts, with balances totalling just under \$1 billion. The rationale for applying interest is that, for certain categories of deferrals, regardless of the source of financing,

Exhibit 3: Retained earnings and total debt, 2006-2011 (\$millions)



Source: Compiled by the Office of the Auditor General of British Columbia from BC Hydro’s annual reports.

there is an opportunity cost associated with using funds to defer costs that should be accounted for. Therefore, each year, these deferral accounts grow by additions as well as interest applied on the account balances. Charging interest on deferral account balances results in longer recovery periods. Like a mortgage, interest must first be covered before the deferral

account's principal balance can be paid down. For fiscal 2011, the interest amount on all 14 of these deferral accounts was \$37 million, compared to a pay down of principal of only \$32 million, while new deferral additions of \$442 million were added to these accounts.

The application of interest to deferral accounts is another example of how financial management and financial reporting have been confused. Businesses regularly use available internal resources to fund projects and operations, but notional interest is calculated only for the purpose of financial decision making (i.e. calculating opportunity cost to determine the best financing options). This sort of notional interest is not reflected in the financial statements.

Because BC Hydro includes notional interest on deferred account balances in its financial statements, we have two notable concerns. First, the practice of adding notional interest to deferral account balances extends the period over which they are amortized and recovered. Second, because the net change in deferral account balances is recorded as an adjustment to the financial statements, notional interest has the effect of increasing BC Hydro's net income, influencing calculations of return on equity and the dividend payable to government.

INTERGENERATIONAL IMPACTS

As shown in Appendix B, BC Hydro has made significantly greater use of rate-regulated deferral accounts than comparable Canadian hydro utilities. While deferral accounts can be helpful in ensuring rate stability in the near term, over the long term significant costs deferred today may be unfairly passed on to future ratepayers who receive little or no benefit. This concept of a potential unequal matching of costs and benefits is known as intergenerational inequity.

The Province's legislation governing BC Hydro requires the BCUC to set rates that allow the deferral accounts to be cleared from time to time and within a reasonable period. However, that "reasonable period" is not defined in legislation. The BCUC, however, agreed with BC Hydro in its 2009-2010 *Revenue Requirements Application* that four to six years would be a reasonable period to recover the costs of certain deferral accounts classified as "cost-of-energy."

However, we found that the cost-of-energy deferral accounts are not being recovered in four to six years. The plan for some deferral accounts is for them to be recovered over longer periods or, in some cases, recovery plans do not yet exist.

It is unclear how BC Hydro plans to recover the significant balance of deferred costs, and over what period. In fiscal 2011, interest charges applied to deferred accounts (\$37 million) exceeded the amortization of these accounts (\$32 million). It is difficult to see how balances will be reduced with this additional burden of interest, which has not been factored into BC Hydro's most recent rate submission. The projection in government's review of BC Hydro indicates that deferral balances will increase sharply and stay high over many years, even with currently approved rate increases.

What is clear, however, is that the current trend of escalating deferred expenses is unsustainable. Government's report recommends "that BC Hydro work with the Province to perform a more in-depth review of the growth of regulatory accounts and determine a more sustainable approach to utilizing them over the long term." Better use of regulatory accounts is certainly in order, but is not enough.

Government's report suggests that the balance of regulatory accounts will stop growing at about the \$5 billion mark, although it does not indicate what needs to change in order to achieve this. In addition, the report predicts that the balance of deferred costs will remain largely unchanged for the next decade, and will only gradually decline thereafter: again, with no indication of how this will be achieved. The report also concludes that "the sharp increase in net regulatory assets is a concern." We agree, and therefore make the following recommendation:

RECOMMENDATION 1 – *We recommend that government determine, at the earliest opportunity, how BC Hydro will recover the net deferred costs in its regulatory accounts.*

OPTIONS

Government has three options for recovering deferred costs that need to be considered individually or in combination.

1 – Rate Adjustments

Government's report notes that BC Hydro has "not made any allowance with respect to the ability of BC Hydro to recover the regulatory assets through future rates." Government's policy has been to keep rates low. To avoid undue intergenerational inequity, rates could be adjusted, ensuring repayment over periods related to the benefit received by most customers.

2 – Operating Efficiencies

Government's recent report noted a number of opportunities to increase operational efficiency in the short and long term. We did not review evidence supporting any of government's specific suggestions; however, should these cost savings materialize, increased net revenues could be applied to deferral account balances.

3 – Infusion of Cash

Since the first deferral account was established in 2000, \$3.2 billion has been withdrawn from BC Hydro in the form of dividends paid to the Province. Private sector companies usually pay dividends based on a history of positive financial results. As shown in this report, when the impact of rate-regulated deferrals is taken into account, BC Hydro's net equity – the funds available to invest – has been depleted over the last decade, in part by the dividends paid to the Province.

DECISIONS NEED TO BE SUPPORTED BY TRANSPARENT FINANCIAL REPORTING

The Canadian Institute of Chartered Accountants (CICA) establishes GAAP in Canada. The CICA has observed that “from an economic perspective, rate regulation can have a direct bearing on the economic resources, obligations and performance of a rate-regulated enterprise. It can influence rates that, combined with market conditions, can have an economic impact on current and future revenues and cash flows, thereby affecting future economic benefits and obligations.” In other words, rate regulation can distort reported financial results and subsequent decision making.

Rate-regulated deferral accounting is not permissible under International Financial Reporting Standards (IFRS). Canada will be adopting IFRS as Canadian GAAP for business enterprises such as BC Hydro. Therefore, this is the last year that Canadian accounting standards allow the reporting of deferral accounts in general purpose financial statements. Starting in fiscal 2013 (next year), the full cost of operating expenses should be shown in the year they are incurred, rather than being deferred to future years.

Government's own report noted “concerns that the extensive use of the regulatory accounts reduces transparency of the financial information.” We agree, and have highlighted some of these effects in this report. It is interesting to note that BC Hydro projects \$1.5 billion in additional deferrals related to the implementation of IFRS – a situation that may bring into question whether or not IFRS will have

been implemented. These impacts exemplify why BC Hydro should no longer use rate-regulated deferrals in its financial reporting.

Unfortunately, government has taken a different position. *The Budget Transparency and Accountability Act* was amended in the 2010 session to allow for departures from GAAP, if authorized by Treasury Board via regulation. In July 2011, Treasury Board issued the Government Organization Accounting Standards Regulation, which requires BC Hydro to adopt one part of an American accounting standard that allows rate regulation and thereby avoids the transparency that will be required under Canadian accounting standards.

In addition to the \$2.2 billion net deferral balance that is recorded as an asset, the effect of rate regulation in 2010/11 (as disclosed in note 37 of the Province's Summary Financial Statements) has been to increase the net earnings of BC Hydro, and thus reduce the annual deficit recorded by the Province by \$447 million (fiscal 2010: \$705 million). In addition to undermining the credibility of the financial reporting of BC Hydro, one of British Columbia's most essential institutions, the potential departure from GAAP will be of such significance that it will require the Auditor General to consider qualifying his opinion on the Province's Summary Financial Statements.

We appreciate the concept of regulated deferrals as a theoretical management tool that is integral for stable rate setting. But this objective is significantly different than the objectives of transparency and accountability that underlie financial reporting. Accordingly, we make the following recommendation:

RECOMMENDATION 2 – *We recommend that government prescribe that the annual financial statements for BC Hydro be prepared fully in accordance with Canadian generally accepted accounting principles.*

LOOKING AHEAD

BC HYDRO IS A COMPLEX organization that is integral to the financial health of the Province and the lifestyles we all enjoy. A number of issues relating to cost structures, differential revenues and long-term planning arose during the course of this work that bear consideration for further work by this Office.

As always, we will follow up on this report's two recommendations.

IN ACCOUNTING TERMINOLOGY, the practice of holding items that would normally be expensed in the current period, and instead disclosing them on the balance sheet to be expensed later, is known as “deferring” the cost. There are very limited and specific circumstances where deferrals are allowed in GAAP, such as recording the cost of purchasing long-term assets, which are expensed (depreciated or amortized) over many years to match the expected service life or earning potential of the assets.

Canadian utilities have been using a deferral technique known as *rate-regulated accounting* where entities use special accounts to carry forward windfall revenues and/or unexpected costs to future periods. This allows utilities to smooth out the effect of these events, and dampens short-term impacts on the rates charged to their customers.

BC Hydro uses a number of deferral accounts for both revenues and expenses; however, deferred costs predominate. BC Hydro’s financial statements for the year ended March 31, 2011 disclose a total of \$2,436 million in deferred costs and \$276 million in deferred revenues, for a net total of \$2,160 million. Deferral accounts have been set up and endorsed by the BCUC to cover a range of purposes, including:

- the variances between forecasted costs and revenue expectations;
- the maintenance of assets;
- costs for First Nations negotiation, litigation and settlement;
- environmental compliance and remediation; and
- foreign exchange gains and losses.

As disclosed in BC Hydro’s audited financial statements, in the absence of rate regulation almost all of these amounts would have been included as revenues or expenditures in the financial statements in the year

they occurred. Deferred costs are recorded as “assets” to the utility company because they have a future benefit (the ability to offset the cost against future revenue). Conversely, deferred revenues are recorded as “liabilities” since they represent a reduction from current revenues.

While deferral accounts can help ensure rate stability in the near term, over the long term they have the potential for unfairness to future ratepayers if significant costs incurred today are recovered from future ratepayers, who may receive little or no benefit. This concept of a potential unequal matching of the costs and benefits is known as intergenerational inequity.

For example, if a storm were to damage hydroelectric infrastructure and result in immediate costly repairs, it is the customers currently using the hydroelectric system that benefit most directly from repair work to restore service. However, if these costs are deferred over a long period, future customers can end up paying for repairs for which they received little or no direct benefit.

The concept of deferrals is not unique to the energy utility industry. Insurance organizations experience variations in their revenues (investment income) and expenses (claims history). For the purposes of determining rates charged to customers, the immediate effects of sometimes significant short-term fluctuations in revenues and expenses are smoothed over a number of years.

This process is quite distinct from how these organizations report their overall financial results. The example below illustrates how WorkSafeBC differentiates between reported financial results, and the financial management process that determines rates:

“In accordance with Canadian generally accepted accounting principles, WorkSafeBC’s consolidated financial statements reflect the market value of investments at the end of the reporting year (fair value accounting). They provide a snapshot or point-in-time reading of financial assets... [But] to avoid rate fluctuations generated by financial market volatility, WorkSafeBC continues to set premium rates using smoothed investment accounting ...”

(Source: WorkSafeBC 2010 Annual Report and 2011-13 Service Plan.)

APPENDIX A – A VARIETY OF RATE-REGULATED DEFERRAL ACCOUNTS HAVE BEEN CREATED

BC Hydro regulatory accounts, balances and descriptions as at March 31, 2011

Regulatory Assets			
Account	Balance at Mar 31, 2011 (millions)	Description (unless noted otherwise, all accounts would normally be recorded in BC Hydro's operating results under GAAP)	Impact on 2010/11 Net Income (millions) Increase/(Decrease)
Heritage Deferral Account	\$247	This account is intended to mitigate the impact of certain variances between the forecasted costs in a revenue requirements application (to BCUC) and actual costs of service associated with the Heritage Resources by adjustment of net income.	(\$78)
Non-Heritage Deferral Account	\$362	This account is intended to mitigate the impact of certain cost variances between the forecasted costs in a revenue requirements application and actual costs related to energy acquisition and maintenance of BC Hydro's distribution assets by adjustment of net income.	\$243
BCTC Deferral Account	\$0	Under a Special Directive issued by the Province, variances that arose between the costs of transmission services included in BC Hydro's rates and BCTC's rates are deferred. The balance of this account has been transferred to the Non-Heritage Deferral Account.	(\$18)
Trade Income Deferral Account	\$188	Under a Special Directive issued by the Province, this account is intended to mitigate the uncertainty associated with forecasting the net income of BC Hydro's trade activities. The impact is to defer the difference between the Trade Income forecast in the revenue requirements application and actual Trade Income.	\$66
Demand Side Management Programs	\$506	DSM programs are designed to reduce the energy requirements on BC Hydro's system. Costs of the programs include materials, direct labour and applicable portions of administration charges, equipment costs, and incentives.	\$64
First Nation Negotiations, Litigation and Settlement Costs	\$399	This account relates to provisions for and costs incurred with respect to First Nation negotiations, litigation and settlements. Costs relating to identifiable tangible assets that meet the capitalization criteria are recorded as property, plant and equipment.	–
Non-Current Pension Cost	\$72	Variances that arise between forecast and actual non-current pension cost are deferred.	(\$14)
Site C	\$104	Site C expenditures incurred in fiscal 2007 through fiscal 2011 have been deferred.	\$44

APPENDIX A – A VARIETY OF RATE-REGULATED DEFERRAL ACCOUNTS HAVE BEEN CREATED

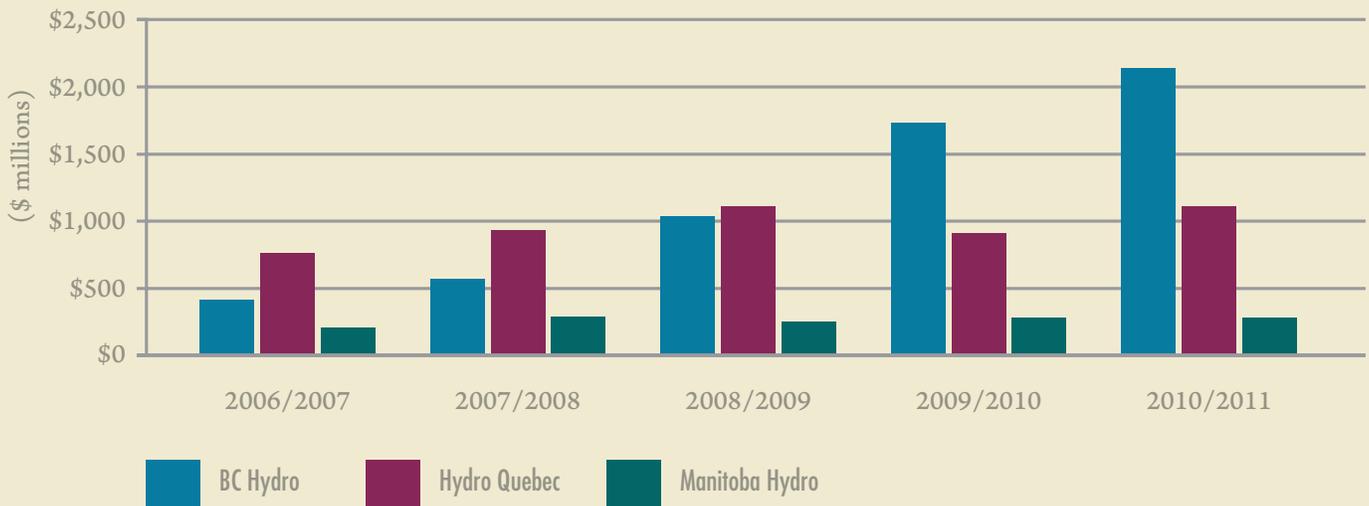
Account	Balance at Mar 31, 2011 (millions)	Description (unless noted otherwise, all accounts would normally be recorded in BC Hydro's operating results under GAAP)	Impact on 2010/11 Net Income (millions) Increase/(Decrease)
Environmental Compliance	\$231	A liability provision for environmental compliance and remediation arising from the costs that will likely be incurred to comply with the Federal Polychlorinated Biphenyl (PCB) Regulations enacted under the <i>Canadian Environmental Protection Act</i> and the remediation of environmental contamination at Rock Bay.	(\$90)
Other Regulatory Accounts	\$327	Other regulatory asset accounts with individual balances less than \$60 million include the following: Depreciation Study Adjustments, Contributions in Aid of Construction Amortization Variance, Capital Project Investigation Costs, Procurement Enhancement Initiative Costs, Smart Metering and Infrastructure Project Costs (SMI), GM Shrum Unit 3 Outage, Home Purchase Option Plan, Return on Equity (ROE) Adjustment, and Waneta Rate Smoothing.	\$62
Total Regulatory Assets	\$2,436		\$279
Regulatory Liabilities			
Future Removal and Site Restoration Costs	\$140	This account was established by a one-time transfer of \$251 million from retained earnings. The costs of dismantling and disposal of property, plant and equipment will be applied to this regulatory liability if they do not otherwise relate to an asset retirement obligation. In the absence of rate regulation, it is likely a liability would not be recognized under GAAP.	(\$19)
Foreign Exchange Gains and Losses	\$106	Foreign exchange gains and losses from the translation of specified foreign currency financial instruments are deferred.	\$5
Finance Charges	\$4	Variances that arise between forecast and actual finance charges are deferred.	(\$100)
Other Regulatory Accounts	\$26	Other regulatory liability accounts with individual balances less than \$15 million include the following: Net Employment Costs, Amortization of Capital Additions, Storm Damage, and Taxes.	(\$168)
Total Regulatory Liabilities	\$276		(\$167)
Net Regulatory Assets	\$2,160		\$447

Source: BC Hydro 2011 Annual Report page 59.

APPENDIX B – BC HYDRO'S USE OF RATE-REGULATED DEFERRALS EXCEEDS OTHER COMPARABLE UTILITIES

THE CHART BELOW shows that the growth of deferral account balances for BC Hydro has greatly exceeded that of both Quebec and Manitoba for the same five-year period. Government's recently issued review of BC Hydro forecasts deferred expense balances to continue to grow, reaching \$4.9 billion by 2017.

Comparison of deferral account balances for B.C., Quebec and Manitoba hydro utilities, 2006/07–2010/11 (\$millions)



Source: Compiled by the Office of the Auditor General of British Columbia from annual reports of BC Hydro, Manitoba Hydro and Hydro Quebec.

Note: Quebec Hydro fiscal year-end is December 31, while both BC Hydro and Manitoba Hydro fiscal year-ends are March 31.

Note: no deferral accounts were in use at Hydro Quebec prior to 2004.