

BC HYDRO FISCAL 2017 TO FISCAL 2019 REVENUE  
REQUIREMENTS APPLICATION

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THE BC UTILITIES COMMISSION SHOULD NOT APPROVE ANY DISCRETIONARY REQUESTS PENDING A NEW APPROACH TO BC HYDRO FINANCING

This submission has been prepared assuming that the New Democratic Party (NDP) will form the government of this province in late June or early July 2017.

Will the new provincial government bring a new approach to the financial management at BC Hydro? Will the 10-year financial plan be replaced by a more honest plan to address the growing debt at BC Hydro; one less politicized by detailed cabinet orders to both BC Hydro and the regulator?

A one-year freeze on electricity rates pending a review of BC Hydro's financing was part of the New Democratic Party's election platform. Given this, and the example of Manitoba,<sup>1</sup> the prudent course for the BC Utilities Commission to follow would be to approve only those aspects of the F17 to F19 rate submission that are required by existing legislation or regulation.

All other discretionary requests, such as changing the scope of regulatory accounts and changing the pension discount rate, should not be approved.

The option of delaying a final approval pending clarification of the new government's intentions is not recommended. BC Hydro is proceeding based on approval of its request, and the longer a decision is delayed the more entrenched the plan becomes. It may take many months before the planned government review is completed, therefore it is necessary that there be certainty regarding the base or status quo scenario used in that financial review. A delay in the decision on the BC

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[http://www.bcpolicyperspectives.com/media/attachments/view/doc/occasional\\_paper\\_no\\_32\\_manitoba\\_hydro\\_2\\_june\\_2017/pdf](http://www.bcpolicyperspectives.com/media/attachments/view/doc/occasional_paper_no_32_manitoba_hydro_2_june_2017/pdf)

Hydro submission will add an unnecessary level of uncertainty for those conducting the review.

## RESTORING THE BC UTILITIES COMMISSION'S INDEPENDENCE

It is probable that the promised review of BC Hydro's finances will include, among other things, recommendations on the role of the B.C. Utilities Commission in regulating the public utility, and setting electricity prices.

The Liberal government politicized<sup>2</sup> the management and finances of BC Hydro, which became especially evident in 2012 when it took direct control of setting BC Hydro's rates.<sup>3</sup> The prescriptive cabinet directions of March 2014, which implemented the government's 10-year financing plan, forced the B.C. Utilities Commission to become (in the words of Rowland Harrison Q.C.) basically an agent of the government.<sup>4</sup>

The July 2016 cabinet orders respecting the net income and the dividend demonstrate that the government has tightened its control. In fact, the layered directives have become so complex and interconnected that calculating how all interact has become more important than forecasting sales and costs. Actual revenue and expenditures are no longer relevant in calculating the annual rate requirement; they are more relevant to calculating the increase in BC Hydro's debt. Appendix A lists the main government orders and directives.

The 2014 report of the independent review of the B.C. Utilities Commission may help inform the new government's policy regarding the regulation of BC Hydro. The B.C. Utilities Commission should consider whether it could assist the new provincial administration by proposing reforms in the current oversight relationship between it and BC Hydro.

Anticipating significant changes in BC Hydro's financial plans in the coming months, my final submission is limited to two aspects of the current rate submission. These include the propriety of supplementing actual revenue through regulatory account assets, and the proposed averaging of the pension discount rate.

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<sup>2</sup> <http://policyoptions.irpp.org/magazines/march-2017/how-bc-politicized-electricity-rates/>

<sup>3</sup>

[http://www.bcpolicyperspectives.com/media/attachments/view/doc/occasional\\_paper\\_no\\_15\\_bcuc\\_independence\\_27\\_october\\_2016/pdf](http://www.bcpolicyperspectives.com/media/attachments/view/doc/occasional_paper_no_15_bcuc_independence_27_october_2016/pdf)

<sup>4</sup> Ibid., p. 3.

## SECTION 1 USING REGULATED ACCOUNTING TO RECORD UNBILLED REVENUE

### The Non-Heritage Deferral Account (NHDA)

BC Hydro has been recording domestic revenue variances in the NHDA since 2008/09. For the last eight years, this practice has allowed BC Hydro to record a higher net income, and to pay a dividend to the government than would have been the case if the revenue shortfall had not been recorded and deferred.

BC Hydro attempted to explain how the BCUC's 2009 approval of the deferring of the domestic cost of energy variance was converted to the deferring of a revenue shortfall.<sup>5</sup>

The evolution of the plain meaning of cost of energy began with BC Hydro including the phrase "load variance" into the wording, which was then converted again to a "revenue variance."

The government could have clarified that it desired the domestic revenue shortfall to be recorded and deferred to the NHDA, but Direction 7 continues to use the "cost of energy" wording.

The BCUC produced a useful summary of the amounts included in the NHDA from 2004/05 to 2015/16, which shows that during this period approximately \$998 million has been added to this account to mitigate, if not fully offset, the domestic revenue variance. Of the total, approximately \$853 million has been added since the government began to set BC Hydro rate changes, including approximately \$467 million in the last two years.<sup>6</sup>

### The Rate Smoothing Regulatory Account (RSRA)

In 2014, the B.C. Utilities Commission was ordered by cabinet to approve a new revenue deferral device to record the difference between the required (budgeted) revenue and the actual revenue expected from the allowed rate increase.

This RSRA is the key to the 10-year financing plan announced in late November 2013, as it allows the government to set annual electricity rate increases at less than

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<sup>5</sup> BCUC 1.129 and BCUC 2.279.

<sup>6</sup> BCUC 1.126.1.

the forecasted increase in costs. In effect, the RSRA allows the government to charge current customers a lower rate for electricity, and the resulting shortfall adds to the debt liability faced by future customers.

Table 1 shows the effects of the actual rate increases and what the equivalent increases that were transferred to the NHDA and the RSRA from 2011/12 to 2015/16, and the plan for 2016/17 to 2019/20. In 2015/16, a 1% increase of rate revenue equated to approximately \$42.8 million, and this conversion rate has been used for all years.

TABLE 1 PERCENT RATE INCREASE (2016 dollars for NHDA and RSRA)

|         | 2012 | 2013 | 2014 | 2015 | 2016 | P2017 | P2018 | P2019 | P2020 |
|---------|------|------|------|------|------|-------|-------|-------|-------|
| ALLOWED | 3.9  | 1.4  | 9.0  | 6.0  | 4.0  | 3.5   | 3.0   | 2.6   | 2.6   |
| NHDA    | 1.5  | 4.1  | 3.2  | 4.8  | 6.3  | --    | --    | --    | --    |
| RSRA    | --   | --   | 3.9  | 2.8  | 4.9  | 6.7   | 7.0   | 9.5   | 2.3   |
| TOTAL   | 5.5  | 5.5  | 16.1 | 13.6 | 15.2 | 10.2  | 10.0  | 12.1  | 4.9   |

Source: BC Hydro F17 to F19 Rate Request, Table 7-2, p. 7-6, and BCUC 1.126.1.

BC Hydro is not forecasting any revenue variance transferred to the NHDA starting in 2016/17, partly because the load forecast included in the July 2016 submission is more realistic than the forecast used in the F2012 to F2015 rate requirements.

#### Accounting Standard

BC Hydro is using the NHDA and the RSRA to create an asset, and funds are then transferred to supplement the actual revenue to match the budgeted revenue for each fiscal year. Cabinet, through OIC 590/16 (signed in conjunction with the submission of the current rate request), has set the net income for 2016/17 to 2018/19. The revenue deferrals, combined with the various cost variance deferral accounts, help ensure that the net income targets are achieved. The revenue shortfalls and the cost over-runs add to BC Hydro's growing debt.

BC Hydro is using a modified form of the US ASC 980 accounting standard to employ deferral/regulatory accounting. In 2011, cabinet exempted the public

power utility from the need for an independent third-party regulator, which is fundamental to ASC 980 standard.<sup>7</sup>

The standard also requires that it is probable, or reasonable, to assume the regulatory balance will be included in future rates, to lessen the accumulation of additional debt liability. This was recently discussed by the Ontario Financial Accountability Office in Appendix C of its report on that government's plan to reduce electricity prices through a new regulatory deferral account.<sup>8</sup>

The Ontario Auditor General stated that the plan, which has a recovery mechanism, is legal but deceptive.<sup>9</sup> The BC Auditor General has not commented on the RSRA deferral of unbilled revenue, where a recovery mechanism has not been identified or requested.

BC Hydro has a recovery mechanism for the NHDA balance in the 5% Deferral Account Rate Rider. However, no recovery mechanism has been identified for the RSRA balance. The government's 10-year financing plan of July 2016 shows the balance in the RSRA growing from \$166 million in 2013/14 to \$1.59 billion by 2020/21.<sup>10</sup>

BC Hydro has not identified a recovery mechanism for the RSRA for the current test period. In response to RM 1.3.3, BC Hydro stated that it intends to propose to recover the balance in a future revenue requirements application.

BC Hydro is not requesting approval of a recovery mechanism for the Rate Smoothing Regulatory Account in this Application. In a future revenue requirements application, BC Hydro will propose to recover the balance of the Rate Smoothing Regulatory Account in rates. BC Hydro's proposal will enable uniform forecast rate increases over the fiscal 2020 to fiscal 2024 period, and will ensure that the recovery of the Rate Smoothing Regulatory Account is such that there is zero balance in this account by the end of fiscal 2024 as these are key requirements of the 2013 10 Year Rates Plan.

At the same time, BC Hydro has said that the average annual rate increase for the balance of the 10-year financial plan will be 2.6%. When asked to specify how the recovery of the \$1.59 billion over the 2021/22 to 2023/24 period is possible with

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<sup>7</sup> [http://www.bcpolicyperspectives.com/media/attachments/view/doc/occasional\\_paper\\_no\\_21\\_30\\_january\\_2017/pdf](http://www.bcpolicyperspectives.com/media/attachments/view/doc/occasional_paper_no_21_30_january_2017/pdf)

<sup>8</sup> [http://www.fao-on.org/en/Blog/Publications/Fair\\_hydro](http://www.fao-on.org/en/Blog/Publications/Fair_hydro)

<sup>9</sup> <http://news.nationalpost.com/news/canada/canadian-politics/david-reevely-ontario-liberals-jiggery-pokery-on-the-hydro-file-means-savings-plan-will-cost-twice-as-much-as-it-saves>

<sup>10</sup> BC Hydro RRA F17 to F19, Table 7-2.

an average annual 2.6% rate increase, the standard response is the BC Hydro is “on track” to accomplish this feat. The same wording was repeated in the May 23, 2017 final submission.

The B.C. Utilities Commission should closely examine whether the RSRA, lacking a recovery mechanism, conforms to the US ASC 980 accounting standard. Given the information provided by BC Hydro, it is not probable that the balance will be paid off during the next rate period without a rate increase significantly more than the 2.6% annual average increase.<sup>11</sup>

## SECTION 2 THE PENSION DISCOUNT RATE

BC Hydro is requesting a change in the calculation of the pension discount rate for calculating the F17 to F19 rates. Using a five-year average, instead of an estimate of the actual rate for each year, will likely increase the discount rate and lower the funding requirement. BC Hydro will continue to use the actual rate for the preparation of its annual financial statements.

BC Hydro justified the requested change by stating that interest rates are not predictable. As the pension obligation changes year by year, primarily because of changes to the discount rate (interest rate), smoothing the rate over a five-year period will reduce the volatility.

Estimating interest rate changes is an important component of developing a multi-year financial plan. BC Hydro uses interest rate forecasts provided by the provincial government and its actuary.

Because the actual year-end pension obligation will use the actual discount rate, and assuming interest rates remain below the proposed five-year average for F17 to F19, the result of the requested change is to understate the required rate increase.

There is no reasonable justification to change the current method of estimating the pension obligation. One must conclude that the real purpose of the requested change is to understate the forecasted (8.9%) rate increase.

Given that BC Hydro must conform to the three-year government imposed rate increase caps, the effect of the pension discount change is a lower RSRA

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<sup>11</sup> [http://www.bcpolicyperspectives.com/media/attachments/view/doc/occasional\\_paper\\_no\\_25\\_12\\_march\\_2017/pdf](http://www.bcpolicyperspectives.com/media/attachments/view/doc/occasional_paper_no_25_12_march_2017/pdf)

requirement for F17 to F19 than would have been the case without this requested change. This was confirmed by BC Hydro's response to the B.C. Utilities Commission's 2.294.13 information request, where it stated that the alternative to the proposal will be an increase in the RSRA.

Recovering the balance in the Non-Current Pension Regulatory Account over the expected average service life of the employees is consistent with the pension regulatory accounts for other regulated Canadian power utilities.<sup>12</sup> Basing the required pension forecast on a five-year average discount rate is not, however, consistent with other regulated utilities. The proposal would add more complexity to the calculation, and potentially result in a larger variance between the budgeted and actual pension obligation at year-end.

BC Hydro has been underfunding its pension plans for a number of years, as discussed in Appendix B.

The B.C. Utilities Commission must balance the interests of the shareholder with the interests of current and future customers. It should reject this request as it is likely to further distort the rate paid for electricity, and transfer an inordinate amount of the cost of pension obligations to future ratepayers.

## APPENDIX A

### KEY GOVERNMENT DIRECTIVES RESPECTING BC HYDRO

2008

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<sup>12</sup> Manitoba Hydro does not defer its pension liability in a regulatory asset.

OICs 27/08 and 28/08 January; rescinded BCUC instruction to rebalance rates, and defined “deemed equity” which increased the net income and dividend.

2009

OIC 74/09 February 2009; orders increase in BCUC benchmark ROE by 1.6% for three years.

2010

Clean Energy Act; exempts some major capital projects from BCUC review and approval (including Site C), integrates the BC Transmission Corporation with BC Hydro, and required BC Hydro to achieve energy conservation targets while encouraging private power generation.

2011

Treasury Board Regulation 146/2011 of July 5, 2011 allowed BC Hydro to adopt the US accounting standard ASC 980 to preserve its regulatory/deferral accounts. The order exempted BC Hydro from the requirement to have an independent third-party regulator set the annual rates, thus creating a unique accounting standard for the Crown utility.

2012

OIC 314/12 May 2012; ended BCUC’s discretion to set rates for 2011 to 2013 by imposing increases of 8%, 3.91% and 1.44% for the three years which was well below the indicated requirements.

2013

November; government announces new 10-year financial plan for BC Hydro.

2014

OICs 96/14 and 97/14 February; Directive 6 and Directive 7 detail the 10-year plan requirements and provide highly detailed calculation and approval requirements covering 2015 and 2016 rate increases, and cap the BCUC allowed increases from 2016 to 2018; requires the BCUC to approve a new ‘rate smoothing’ deferral account allowing BC Hydro to record and defer the difference between the required revenue and that generated by the suppressed rates.

2015

OIC 123/16 February; requires the BCUC to allow the recovery of the Thermal-Mechanical Pulp program in future rates.

2016

OIC 123/16 February; BCUC must allow deferral of costs of mining companies rate loan program.

OIC 589/16 July; sets dividend target for 2016/17.

OIC 590/16 July; sets net income (distributable surplus) targets for 2016/17 and next two years confirming that BC Hydro no longer subject to standard cost of service rate model for rate-setting.

## APPENDIX B

### PENSION SOLVENCY<sup>13</sup>

BC Hydro's defined benefit pension plan solvency ratio was at 97% in 2007/08, but has since declined to 72.3% as of 2015/16. The pension liability is shown as a liability on its balance sheet, but is offset by assets in two regulated accounts.

The annual net liability and solvency ratio are shown in Table 1, as well as the discount rate and the two regulatory deferral accounts.

**TABLE 1 BC HYDRO PENSION KEY INDICATORS (\$=millions)**

|                   | <b>07/08</b> | <b>09/10</b> | <b>11/12</b> | <b>12/13</b> | <b>13/14</b> | <b>14/15</b> | <b>15/16</b> |
|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Pension Liability | 79           | 364          | 862          | 1,035        | 779          | 1,066        | 1,216        |
| Solvency Ratio %  | 97.0         | 85.7         | 74.4         | 72.0         | 78.9         | 75.5         | 72.3         |
| Other Benefits    | 221          | 238          | 320          | 361          | 374          | 432          | 441          |
| Discount Rate %   | 5.50         | 7.35         | 5.42         | 4.62         | 4.00         | 4.37         | 3.51         |

<sup>13</sup> For a more detailed discussion see

[http://www.bcpolicyperspectives.com/media/attachments/view/doc/occasioal\\_paper\\_no\\_20\\_january\\_14\\_2017/pdf](http://www.bcpolicyperspectives.com/media/attachments/view/doc/occasioal_paper_no_20_january_14_2017/pdf)

|  |                |     |     |     |     |     |     |     |
|--|----------------|-----|-----|-----|-----|-----|-----|-----|
|  |                |     |     |     |     |     |     |     |
|  | Defer-Pensions | nil | 72  | 55  | 544 | 280 | 564 | 691 |
|  | -IFRS Δ        | nil | nil | nil | 723 | 688 | 650 | 612 |

Source: BC Hydro annual reports.

Changes in the actuarial valuation of plan assets, and the discount rate on obligations, can have dramatic year-over-year effects on the net balance of the pension plan.

Following the financial crisis of 2008 the value of the pension assets, especially the equity assets, dropped considerably, resulting in a large increase in the pension liability. In the F2009-F2010 rate request to the BC Utilities Commission, BC Hydro sought approval of a deferral of the variance between the pension funding assumed in the rate request and any variance. Without the deferral, BC Hydro estimated that the rates would need to increase by an additional 3%. Given the volatility of the financial markets in late 2008 and early 2009, the Commission agreed to the deferral, pending the next rate review for 2010/11.

The pension deferral was renewed in 2010/11 and again for the 2011/12 to 2013/14 rate term. The B.C. Utilities Commission agreed to widen the scope of the deferral account to include the variance in costs in the “Other Post-Employment Benefits,” which includes short-term medical, life insurance and other benefits. BC Hydro is responsible for ensuring that the pension plan has sufficient assets to pay pension benefits, but the other benefits are not funded.

Cabinet’s Direction 7 (March 2014) continued the pension deferral account (the Non-Current Pension Regulatory Account), and it remains in place for the current F17 to F19 rate request.

Since 2012, BC Hydro’s solvency ratio has remained below 75%, and has declined since 2014. Hydro Quebec and the two BC Utilities Commission regulated Fortis corporations have maintained higher solvency ratios. Table 2 shows the change in the ratios from 2012 to 2016 as of December 31<sup>st</sup>, and March 31<sup>st</sup> for BC Hydro.

**TABLE 2 COMPARATIVE PENSION SOLVENCY RATIOS (December)**

|                     | <b>2012</b> | <b>2013</b> | <b>2014</b> | <b>2015</b> | <b>2016</b> |
|---------------------|-------------|-------------|-------------|-------------|-------------|
| BC Hydro (March 31) | 74.4        | 72.0        | 78.9        | 75.5        | 72.3        |
| Hydro Quebec        | 85.6        | 100.6       | 93.3        | 96.2        | 95.6        |
| FortisBC (elect.)   | 71.2        | 83.3        | 83.1        | 86.2        | 87.6        |
| Fortis Energy (gas) | 79.0        | 84.7        | 82.5        | 85.0        | 87.9        |
| ICBC                | 91.6        | 92.9        | 102.9       | 95.9        | 93.0        |

Source: Annual Reports. Manitoba Hydro has a low solvency ratio, but it's main pension fund is part of the provincial government's plan. ICBC added as a comparative self-supporting provincial Crown that does not have access to regulatory accounting.

BC Hydro has stated that the solvency method of assessing the funding status is not appropriate, because as a Crown corporation there is a low probability of it being wound-up. It says that on a going concern basis the pension obligations are fully funded.<sup>14</sup>

It uses letters of credit (currently approximately \$1.2 billion) because it believes that this is “a more efficient use of financial resources by reducing borrowing requirements.”<sup>15</sup> This statement assumes that the corporation would need to increase its borrowing, rather than reduce its equity, to close the solvency gap. Reducing its equity would result in a lower equity to net debt ratio and preclude the payment of a dividend to the government.

BC Hydro has taken a passive approach to the problem of the pension deficiency in the belief that higher interest (discount) rates will increase the solvency ratio; “It does not make sense to fund a solvency deficit caused by historically low discount rates, as an increase in the discount rate over time will resolve the solvency deficit. BC Hydro notes that a 100 basis point (i.e., 1 per cent) increase in the discount rate will decrease the solvency deficiency by approximately \$0.5 billion”<sup>16</sup>

## RECENT CHANGES IN DEFINING SOLVENCY

<sup>14</sup> BCUC, BC Hydro F17 to F19, RM 1.2.1.

<sup>15</sup> Ibid.

<sup>16</sup> BCUC, BC Hydro F17 to F19 RRA, RM 1.2.9

Pension legislation in this province continues to require that corporations fully fund their pension plans on a solvency basis. Recent changes in Quebec and Ontario are intended to give corporations some relief respecting the funding of their plans.

In January 2016, Quebec changed from a solvency ratio to a going concern valuation, but it requires a form of contingency fund in addition to the 100% going concern funding, to provide an additional funding buffer for unforeseen adverse events.<sup>17</sup>

Ontario has introduced legislation to reduce the solvency ratio to 85% from 100%.<sup>18</sup> If the 85% ratio was applied to BC Hydro, its 2015/16 pension funding shortfall would decline from \$1.2 billion at the 100% ratio, to approximately \$650 million.

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<sup>17</sup> <http://www.benefitscanada.com/pensions/db/quebec-shakes-up-pension-landscape-with-shift-to-going-concern-funding-77211>

<sup>18</sup> <https://www.theglobeandmail.com/report-on-business/ontario-eyes-new-rules-for-pension-funding/article35067299/>