

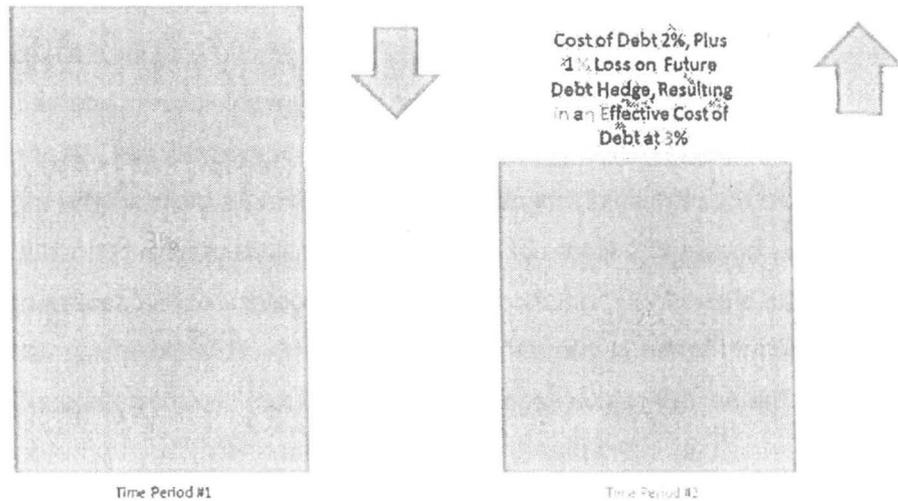
Debt Management Regulatory Account
Proceeding
Exhibit B-1, Application
December 2015
A2-6



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Figure 2 Use of Future Debt Hedges – Decrease in Rates

Use of Future Debt Hedges - Decrease in Rates



3 Figure 2 also assumes that 3 per cent is the interest rate to be set for long-term future debt. If interest rates drop
4 to 2 per cent, a 1 per cent loss on the Future Debt Hedge will effectively increase the overall interest cost to
5 3 per cent. As noted above, it is BC Hydro's view that in current market conditions the risk of interest rates
6 increasing is greater than the risk of interest rates decreasing.

7 BC Hydro believes the DMRA is necessary to capture mark-to-market gains and
8 losses from Future Debt Hedges as the existing accounting options available to
9 BC Hydro under Prescribed Standards² could give rise to the following two
10 undesirable consequences:

- 11 (a) intergenerational inequity in customer rates and rate volatility; and
- 12 (b) increased overall debt load and finance charges as a result of impacts on
13 dividends as further described in section 3 below.

² In accordance with the directive issued by the Province's Treasury Board, BC Hydro is to prepare its financial statements in accordance with the accounting principles of International Financial Reporting Standards, combined with regulatory accounting in accordance with Financial Accounting Standards Board Accounting Standards Codification 980, *Regulated Operations*

1 corresponding changes in the Province of British Columbia Bonds is currently in
2 excess of 94 per cent. With a correlation this high, BC Hydro therefore expects that
3 the proposed Future Debt Hedges will be highly effective in offsetting changes in the
4 future cost of long-term debt. However, in extreme market conditions, (such as
5 during the credit crisis of 2008 to 2009), there is a risk that markets may become
6 temporarily dislocated (meaning markets that typically move together separate and
7 behave differently), which would cause the correlation between the Future Debt
8 Hedges and the future debt to decrease, which could increase the risk of an
9 ineffective hedge. BC Hydro believes that the risk of market dislocation prior to the
10 Settlement Date is low, and is outweighed by the risk of ratepayer exposure to
11 unhedged increases in interest rates. Accordingly, BC Hydro believes that in this low
12 interest rate environment, execution of Future Debt Hedges as described in this
13 application are part of a prudent debt management strategy to protect ratepayers
14 from the risk of higher interest rates.

15 **3 Accounting for Future Debt Hedges**

16 Under Prescribed Standards, the two options to account for Future Debt Hedges
17 are:

- 18 • Mark-to-Market Accounting; and
- 19 • Hedge Accounting.

20 **3.1 Mark-to-Market Accounting**

21 Future Debt Hedges are required to be recognized at fair value under the Prescribed
22 Standards. Changes in fair value from period to period give rise to mark-to-market
23 gains and losses over the term of the Future Debt Hedge. Using Mark-to-Market
24 Accounting, any such mark-to-market gains and losses on the Future Debt Hedges
25 would be immediately recognized in finance charges, prior to the issuance of the
26 associated future long-term debt. However, as these mark-to-market gains and

1 losses are unpredictable, they would not be included in BC Hydro's finance charge
2 forecast. BC Hydro therefore believes that such gains and losses would be eligible
3 to be deferred in the Total Finance Charges Regulatory Account as variances to the
4 finance charge forecast. Transfers to the Total Finance Charges Regulatory Account
5 are recovered in rates over the next revenue requirement test period.

6 Given the potential for significant mark-to-market gains and losses on the Future
7 Debt Hedges (for example, a 1 per cent increase/decrease in the ten-year fixed
8 bond rate could result in \$87 million of mark-to-market gains or losses on a \$1 billion
9 ten-year Future Debt Hedge), the amortization of such mark-to-market gains and
10 losses from the Total Finance Charges Regulatory Account over the subsequent
11 revenue requirements test period (i.e., two to three years) could create
12 intergenerational equity or rate volatility issues. Ratepayers during the revenue
13 requirements test period would be impacted by gains or losses on the Future Debt
14 Hedges, whereas future ratepayers, starting at the time of issuance of the underlying
15 debt and extending over the ten to 30-year term of that debt, would be impacted by
16 the interest rate costs for the debt. Therefore, for the ratepayer, the gains or losses
17 on the Future Debt Hedges would be detached from the increase or decrease in
18 interest rate costs of the associated future debt.

19 In addition, mark-to-market gains and losses on the Future Debt Hedges are not
20 eligible to be included in the calculation of capitalized Interest During Construction
21 (IDC) under the Mark-to-Market accounting option. IDC needs to be taken into
22 consideration as interest costs incurred on future long-term debt that is related to the
23 construction of a capital asset are eligible to be capitalized and included in the
24 capital cost of the asset under construction, and thereby recovered through rates
25 over the life of the capital asset. The inability to include the mark-to-market gains or
26 losses in the calculation of IDC leads to the same intergenerational inequity as noted
27 above. Ratepayers during the next test period would be impacted by mark-to-market
28 gains and losses through amortization of the Total Finance Charges Regulatory

1 debt by approximately \$1.1 billion (resulting in higher interest costs), while a
2 \$500 million decrease in OCI in F2017 would decrease cumulative dividends and
3 associated debt by only about \$0.9 billion.

4 **DMRA as an Alternative to Hedge Accounting**

5 The DMRA is BC Hydro's preferred alternative to Hedge Accounting and
6 Mark-to-Market Accounting because it encompasses the benefits of Hedge
7 Accounting without the associated risks of an ineffective hedge and the
8 administrative burden.

9 Using the DMRA, the hedging relationships are assumed to be perfect hedges and
10 all mark-to-market gains and losses on the Future Debt Hedges would be deferred
11 into the DMRA instead of included in OCI. The DMRA balance would then be
12 amortized to finance charges in future years to offset or match against the future
13 interest expense on the debt issues that were being hedged, thereby effectively
14 locking in the current low interest rates on future long-term debt issues. These
15 finance charges would also be eligible to be included in the calculation of IDC, to the
16 extent the debt relates to capital projects.

17 BC Hydro proposes that the amortization of the DMRA to finance charges would
18 commence in the test period *following* the test period in which the debt associated
19 with a particular Future Debt Hedge is issued. The alternative would be to
20 commence the amortization of the DMRA to finance charges *in the same* test period
21 as the debt is issued, which would result in the finance charges being included in the
22 Total Finance Charges Regulatory Account as they would not have been forecast in
23 the test period in which the debt is issued. BC Hydro's proposal would, at most,
24 result in a delay of amortization of one or two years following the issuance of the
25 debt.