



ORDER NUMBER
G-85-23

IN THE MATTER OF
the *Utilities Commission Act*, RSBC 1996, Chapter 473

and

British Columbia Hydro and Power Authority
Application for Approval of Cloud Costs Regulatory Account

BEFORE:

C. M. Brewer, Panel Chair
D. M. Morton, Commissioner
A. Pape-Salmon, Commissioner

on April 18, 2023

ORDER

WHEREAS:

- A. On November 18, 2022, the British Columbia Hydro and Power Authority (BC Hydro) filed an application (Application) with the British Columbia Utilities Commission (BCUC) seeking approval, pursuant to sections 59 to 61 of the *Utilities Commission Act* (UCA), to establish a new Cloud Costs Regulatory Account;
- B. BC Hydro seeks approval of the following, as filed in the Application and clarified during the information request process:
 - (i) To establish a new Cloud Costs Regulatory Account;
 - (ii) To defer to the Cloud Costs Regulatory Account, beginning in fiscal 2023 and on an ongoing basis:
 - (a) Actual Cloud Arrangement implementation operating costs that would have been capitalized for each project had the Cloud Arrangement been eligible for capitalization as an intangible asset; and
 - (b) Cloud Arrangement usage fee operating expense variances attributable to unplanned Cloud Arrangements each year less planned maintenance and support costs associated with the planned Traditional Computing capital project;¹
 - (iii) Effective following the fiscal 2023 to fiscal 2025 Test Period and on an ongoing basis, to amortize into rates from the Cloud Costs Regulatory Account the forecast Cloud Arrangement implementation operating cost balances for each implementation completed or forecast to be

¹ Exhibit B-3, BCUC IR 1.3.4.2.

completed prior to the end of the Test Period, over the remaining expected usage term for each implementation, including renewal periods that are reasonably certain of being exercised;

- (iv) Effective following the fiscal 2023 to fiscal 2025 Test Period and on an ongoing basis, to transfer to the Project Write-Off Costs Regulatory Account, the implementation costs that have been deferred to the Cloud Costs Regulatory Account for projects cancelled prior to completion of the implementation if BC Hydro believes future recovery from ratepayers is appropriate;
- (v) Effective following the fiscal 2023 to fiscal 2025 Test Period and on an ongoing basis, to recover the unplanned usage fee operating expense variance balance at the end of the Test Period over the next Test Period;²
- (vi) To apply interest to the balance of the account based on BC Hydro's current weighted average cost of debt;
- (vii) Effective following the fiscal 2023 and fiscal 2025 Test Period and on an ongoing basis, to amortize forecast interest charged on the account each year from the account each year; and
- (viii) Effective following fiscal 2023 to fiscal 2025 Test Period and on an ongoing basis, to recover, over the next Test Period, the forecast account balance at the end of a Test Period related to the difference between the forecast interest recovered and the actual interest charged to the account during that Test Period;

C. By Order G-375-22, the BCUC established the regulatory timetable for a written process to review the Application, which consisted of one round of BCUC written information requests, letters of comment, and BC Hydro's response to the letters of comment;

D. In its response to BCUC information requests, BC Hydro:

- (i) Stated that each Cloud Arrangement will be tracked separately and that a schedule to reconcile each Cloud Arrangement will be included in each revenue requirements application (RRA); and
- (ii) Acknowledged that BCUC approval is required to recover any amounts transferred to the Project Write-off Costs Regulatory Account;

E. The BCUC has reviewed the Application and evidence and makes the following determinations.

NOW THEREFORE pursuant to sections 59 to 61 of the UCA and for the reasons set out in Appendix A of this order, the BCUC orders as follows:

1. BC Hydro is approved to establish the Cloud Costs Regulatory Account effective fiscal 2023, attracting interest at BC Hydro's weighted average cost of debt to:
 - a. Defer, on an ongoing basis, the forecast Cloud Arrangement implementation operating costs and the variance between forecast and actual Cloud Arrangement implementation operating costs that would have been capitalized for each project had the Cloud Arrangement been eligible for capitalization as an intangible asset;

² Exhibit B-3, BCUC IR 1.3.2.

- b. Amortize the following into rates effective fiscal 2026, on an ongoing basis and subject to BCUC approval of the following amounts:
 - i. The forecast Cloud Arrangement implementation operating cost balance for each implementation completed or forecast to be completed prior to the end of the Test Period, over the remaining expected usage term for each implementation, including renewal periods that are reasonably certain of being exercised; and
 - ii. The forecast annual interest costs and the difference between forecast and actual interest for the preceding test period, over the next test period.
2. Effective fiscal 2023, and on an ongoing basis, BC Hydro is directed to apply for BCUC approval to transfer to the Project Write off Costs Regulatory Account the implementation operating costs that have been deferred to the Cloud Costs Regulatory Account for projects cancelled prior to completion if BC Hydro believes future recovery from ratepayers is appropriate.
3. BC Hydro is directed to establish a separate regulatory account for Cloud Arrangement annual usage fees effective fiscal 2023 and attracting interest at BC Hydro's weighted average cost of debt to:
 - a. Defer, on an ongoing basis, any variances between the actual annual usage fees for unplanned Cloud Arrangements, and the avoided forecast maintenance and support costs associated with the related planned Traditional Computing capital project;
 - b. Amortize the following into rates over the next RRA test period effective fiscal 2026, on an ongoing basis and subject to BCUC approval of the amounts:
 - i. The balance related to unplanned annual usage fee variances at the end of the test period; and
 - ii. The forecast annual interest costs and the difference between forecast and actual interest for the preceding test period.

DATED at the City of Vancouver, in the Province of British Columbia, this 18th day of April 2023.

BY ORDER

Original signed by:

C. M. Brewer
Commissioner

Attachment

British Columbia Hydro and Power Authority
Application for Approval of Cloud Costs Regulatory Account

REASONS FOR DECISION

1.0 Introduction

On November 18, 2022, the British Columbia Hydro and Power Authority (BC Hydro) filed an application (Application) with the British Columbia Utilities Commission (BCUC) pursuant to sections 59 to 61 of the *Utilities Commission Act* (UCA) seeking approval of a new regulatory account, the “Cloud Costs Regulatory Account”.

BC Hydro has historically owned and operated its computer hardware, software, and data at its own facilities or at facilities operated by a dedicated provider which is known as Traditional Computing. The costs associated with Traditional Computing are recognized as a capital asset and recovered from ratepayers through depreciation expense.³ Accordingly, costs associated with new Information Technology (IT) projects are typically planned to follow the Traditional Computing model, with forecast costs capitalized.⁴

BC Hydro is starting to switch to Cloud Arrangements, where BC Hydro does not own or directly manage some or all of the underlying computing assets.⁵ BC Hydro is expected to increase its use of Cloud Arrangements as more software vendors move their products to the cloud, and as more advanced, scalable, high performance, secure and resilient computing services become available.⁶ BC Hydro states it is difficult to forecast costs associated with Cloud Arrangements at the time a project is planned, because whether the project will result in a Cloud Arrangement is often not determined until a technology solution and vendor for the solution have been selected.⁷

In these Reasons, the Panel addresses three specific issues:

1. Should the costs related to Cloud Arrangements be deferred;
2. Whether separate deferral accounts are required for each of implementation operating costs and annual usage fees associated with Cloud Arrangements; and
3. The need for prior BCUC approval for transfers to the Project Write Off Costs Regulatory Account.

2.0 Deferral of Costs Related to Cloud Arrangements

Under a Cloud Arrangement, BC Hydro states two types of costs are incurred: the one-time, upfront implementation costs (implementation operating cost) and the annual usage fee of the solution (annual usage fee).⁸

BC Hydro is proposing to record the following in the Cloud Costs Regulatory Account:

³ Exhibit B-1, Section 1, pp. 1–2.

⁴ Exhibit B-3, BCUC IR 1.4.1.

⁵ Exhibit B-1, Section 1, p. 1 and Section 2.3, p. 7.

⁶ Exhibit B-1, Section 2.3, p. 7.

⁷ Exhibit B-3, BCUC IR 1.2.4.

⁸ Exhibit B-1, Section 1, p. 1.

1. Variances between the forecast and actual Cloud Arrangement implementation operating costs.⁹ BC Hydro is proposing to amortize the balance associated with each Cloud Arrangement project completed or forecast to be completed prior to the end of the Test Period, over the remaining expected usage term (i.e. expected remaining benefit period), including renewal periods that are reasonably certain of being exercised;¹⁰
2. Variances between forecast and actual unplanned annual usage fees for Cloud Arrangements.¹¹ BC Hydro is proposing to recover the forecast usage fee operating expense variance balance at the end of the test period over the next test period.¹²

BC Hydro states that International Financial Reporting Standards (IFRS) require Cloud Arrangement implementation operating costs to be recognized as operating expenses in the year they are incurred, instead of being recovered over the useful life of the Cloud Arrangement. BC Hydro states this creates a misalignment between the rate impacts felt by current ratepayers and the multi-year benefits of the Cloud Arrangement. In addition, as the implementation costs were not planned as operating costs, BC Hydro would not recover the actual implementation operating costs from ratepayers in the absence of the Cloud Costs Regulatory Account.¹³

BC Hydro states the proposed recovery of the Cloud Arrangement implementation operating costs is similar to the existing treatment for capital assets in that ratepayers eventually only pay for the actual costs incurred for capital additions through the existing Amortization of Capital Additions Regulatory Account.¹⁴

Similarly, BC Hydro states under IFRS rules, Cloud Arrangement annual usage fees are also treated as operating expenses when incurred. Revenue requirement applications (RRAs) do not include annual usage fees for forecast IT projects under Traditional Computing as these fees are only incurred as a result of Cloud Arrangements. Consequently, when an IT project is planned as Traditional Computing but is later determined to be a Cloud Arrangement, the incremental annual usage fees would not be recovered in rates, but rather from the account of the shareholder. To address this, the proposed Cloud Costs Regulatory Account captures the operating cost variances attributable to the total annual usage fees of those unplanned Cloud Arrangements to ensure ratepayers pay the actual costs.¹⁵

The Cloud Costs Regulatory Account is proposed as a benefit matching account that captures certain actual operating costs associated with the implementation of, and annual usage fees for, Cloud Arrangements so that these costs can be recovered in future rates.¹⁶

BC Hydro states that each Cloud Arrangement will be separately tracked in order to determine the recovery period of the implementation costs. BC Hydro will provide a schedule in each RRA to reconcile the amortization for each Cloud Arrangement.¹⁷

⁹ Exhibit B-1, Section 1, pp. 2–3.

¹⁰ Exhibit B-1, Section 4.1, pp. 20–21.

¹¹ Exhibit B-1, Section 1, pp. 2–3.

¹² Exhibit B-1, Section 4.1, p. 22.

¹³ Exhibit B-1, Section 3.1, p. 10.

¹⁴ Exhibit B-3, BCUC IR 1.2.3.

¹⁵ Exhibit B-1, Section 3.2, p. 11; Exhibit B-3, BCUC IR 1.3.4.

¹⁶ Exhibit B-1, Section 1, p. 1.

¹⁷ Exhibit B-3, BCUC IRs 1.6.1 and 1.6.4.

Panel Determination

The Panel accepts BC Hydro's rationale for deferring the implementation operating costs related to Cloud Arrangements. Doing so matches the costs of the endeavour with the benefits to ratepayers. This results in rates that are just, reasonable and not unduly discriminatory.

The Panel also accepts BC Hydro's submission that the annual usage fees for unplanned Cloud Arrangements are outside of BC Hydro's control because whether the computing project will result in a Cloud Arrangement versus a Traditional Computing Arrangement is often not determined until a technology solution and vendor for the solution have been selected which could be following the RRA decision for the applicable test period.

For the foregoing reasons, we approve the deferral of these costs.

However, we have concerns about the implementation scheme as proposed by BC Hydro and further address these concerns in the following section.

3.0 Separate Deferral Accounts for Implementation Operating Costs and Annual Usage Fees

BC Hydro states that the Cloud Costs Regulatory Account is a benefit matching account, as the primary purpose is to match the one-time implementation operating costs with the benefits that accrue over the term of the respective Cloud Arrangement. BC Hydro notes that the Cloud Costs Regulatory Account will also be used to capture unplanned annual usage fee operating cost variances and thus contains elements of a variance account. These annual usage fees have no future benefit beyond the period that they cover; therefore, these costs are proposed to be recovered over a short period.¹⁸

BC Hydro does not consider that a separate account for the annual usage fees would have any benefit because both types of costs will need to be tracked and reported on separately, regardless of whether there are separate regulatory accounts for those costs, and the reason for incurring the cost is the same for both the implementation operating cost and the annual usage fees.¹⁹

BC Hydro states it has proposed a single benefit matching regulatory account for simplicity as most of the balance in the account will be related to implementation operating costs that have benefits that accrue over the benefit period of the Cloud Arrangements.²⁰

Panel Determination

BC Hydro's proposal to have one regulatory account for both implementation operating costs and unplanned annual usage fees for Cloud Arrangements may be more straight-forward than having two separate accounts. However, the Panel notes that BC Hydro plans to track and report on the two types of costs separately within that one deferral account, which increases the complexity of using one deferral account.

Further, the purpose of deferral account treatment is different for each of these two types of costs. The deferral of implementation operating costs is to match the costs with the benefits, while the deferral of unplanned annual usage fees is to record variances between forecast and actual costs incurred. Furthermore, the amortization in rates is different, with the implementation operating costs amortized over the remaining

¹⁸ Exhibit B-3, BCUC IR 1.3.1.

¹⁹ Exhibit B-3, BCUC IR 1.6.7.

²⁰ Exhibit B-3, BCUC IR 1.3.1.

expected usage term for each implementation and the annual usage fee variances amortized over the next RRA test period.

Given the different rationale for the deferral treatment of each of these two types of costs, along with the different approach for amortization, the Panel finds that establishing separate deferral accounts is more transparent. **For these reasons, BC Hydro is directed to establish a separate regulatory account for Cloud Arrangement annual usage fee variances effective fiscal 2023 and attracting interest at BC Hydro's weighted average cost of debt to:**

- 1. Defer, on an ongoing basis, any variances between the actual annual usage fees for unplanned Cloud Arrangements, and the avoided forecast maintenance and support costs associated with the related, planned Traditional Computing capital project;**
- 2. Amortize the following into rates over the next test period effective fiscal 2026, on an ongoing basis:**
 - a. The balance related to unplanned annual usage fee variances at the end of the test period; and**
 - b. The forecast annual interest costs and the difference between forecast and actual interest for the preceding test period.**

4.0 Transfers to the Project Write Off Costs Regulatory Account

If a Cloud Arrangement is cancelled prior to completion of the implementation, BC Hydro proposes to transfer the related implementation costs recorded in the Cloud Costs Regulatory Account to the Project Write-off Costs Regulatory Account if BC Hydro believes future recovery from ratepayers is appropriate, and recover these costs, if approved by the BCUC, in accordance with the approved recovery mechanism for that account. BC Hydro states this would result in a similar treatment to what would have occurred had the Cloud Arrangement been eligible for capitalization.²¹

Panel Determination

Effective fiscal 2023 and on an ongoing basis, BC Hydro is directed to apply for BCUC approval to transfer to the Project Write-off Costs Regulatory Account, the implementation operating costs that have been deferred to the Cloud Costs Regulatory Account for projects cancelled prior to completion.

The Panel notes BC Hydro has acknowledged that BCUC approval is required to recover any amounts transferred to the Project Write-off Costs Regulatory Account. However, the Panel is not convinced that BC Hydro should decide on whether cancelled Cloud Arrangements should be recoverable from future ratepayers. Based on BC Hydro's current method of forecasting IT projects, BC Hydro does not determine whether an IT project will result in a Cloud Arrangement until later in the project planning stage. As such, BC Hydro would have sufficient time to evaluate the IT project before continuing the project as a Cloud Arrangement. Based on this, the Panel views that the cancellation of Cloud Arrangements should be a rare event and any proposed write-offs as a result of project cancellations should be reviewed by the BCUC.

²¹ Exhibit B-1, Section 4.1, pp. 21–22.