



ORDER NUMBER
G-265-24

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

and

Creative Energy Mount Pleasant Limited Partnership
Rates for the Mount Pleasant District Cooling System

BEFORE:
E. B. Lockhart, Commissioner

on October 21, 2024

ORDER

WHEREAS:

- A. On October 31, 2023, Creative Energy Mount Pleasant Limited Partnership (CEMP) filed with the British Columbia Utilities Commission (BCUC), pursuant to sections 58 to 61 and 90 of the *Utilities Commission Act*, its application for rates for the Mount Pleasant District Cooling System (DCS) for the provision of cooling service to the Main Alley Development (Application). CEMP requests approval of the following rates on an interim and refundable basis for the three-year period effective January 1, 2024 through December 31, 2026 (Test Period):
1. A levelized capacity charge (\$/kilowatt/month) as set out in Appendix B to the Application to recover the forecast capital and fixed operating costs (Capacity Charge); and
 2. A variable charge (\$/megawatt-hour) as set out in Appendix B to the Application to recover the actual electricity and water costs on a flow-through basis (Variable Charge);
- B. By Order G-350-23, the BCUC approved the Capacity Charge and Variable Charge on an interim and refundable/recoverable basis, effective January 1, 2024;
- C. By Orders G-350-23, G-12-24, G-57-24, G-114-24, G-129-24, G-184-24, and Letter dated June 19, 2024, the BCUC established and amended the regulatory timetables for the review of the Application, which included three rounds of BCUC and intervener information requests (IRs), two requests for submissions, a request for supplemental information, and written arguments;
- D. In each of its responses to BCUC IR No. 2 and BCUC IR No. 3, CEMP filed amended requests for approval of rates and revised rates models and revised tariff pages. Following this, CEMP also provided a revised rates model and revised tariff pages in its supplemental information filed on June 24, 2024; and
- E. The BCUC has considered the Application, evidence and submissions of the parties and makes the following determinations.

NOW THEREFORE pursuant to sections 58 to 61 of the *Utilities Commission Act* and for the reasons outlined in the decision accompanying this order, the BCUC orders as follows:

1. The Capacity Charge and additions to the Revenue Deficiency Deferral Account over the Test Period are approved, as set out in the revised rates model included in CEMP's responses to BCUC IR No. 3, subject to the directives and determinations made throughout this decision and subject to the BCUC determinations in the Generic Cost of Capital (GCOC) Stage 2 Decision that impact CEMP's deemed capital structure and return on equity.
2. Notwithstanding Directive 1 of this order, CEMP is directed to maintain the 2024 Capacity Charge approved on an interim basis by Order G-350-23, pending the BCUC's decision on the GCOC Stage 2 proceeding.
3. CEMP is directed to establish a Revenue Variance Deferral Account to record the difference between revenue collected under the 2024 Capacity Charge approved on an interim basis by Order G-350-23 and the 2024 Capacity Charge resulting from Directive 1 of this order, with interest accruing at CEMP's weighted average cost of capital.
4. The Variable Charge is approved on a permanent basis effective January 1, 2024 through December 31, 2026.
5. CEMP is directed to file a proposal to address the refund or recovery of any amounts related to the variance between interim and permanent rates, including the disposition of the balance of the Revenue Variance Deferral Account, within 30 days of the GCOC Stage 2 Decision, or as otherwise directed by the BCUC in the GCOC Stage 2 Decision, once permanent rates are established.
6. CEMP is directed to recover water chemical costs through the Capacity Charge, effective January 1, 2024.
7. CEMP is directed to record 85 percent of any costs awarded to the CEC for its participation in this proceeding for recovery from CEMP's ratepayers, with the remaining 15 percent being to the account of CEMP's shareholder.
8. CEMP is directed to file a compliance filing within 30 days of this order, including a revised rates model with any applicable adjustments to its revenue requirements and rates to reflect the directives and determinations made throughout this decision, and excluding any updates to CEMP's deemed capital structure and return on equity that are subject to further direction from the BCUC in the GCOC Stage 2 Decision.
9. CEMP is directed to comply with all other directives and determinations outlined in the decision issued concurrently with this order.

DATED at the City of Vancouver, in the Province of British Columbia, this 21st day of October 2024.

BY ORDER

Original signed by:

E. B. Lockhart
Commissioner

Creative Energy Mount Pleasant Limited Partnership
Rates for the Mount Pleasant District Cooling System

DECISION

Table of Contents

Page no.

Executive Summary.....	i
1.0 Introduction	1
1.1 Background and History	1
1.2 Application and Regulatory Process.....	2
2.0 Revenue Requirements and Rates	3
2.1 Uncertainty in Design Peak Capacity for Buildings M1 and M3	5
2.2 Capital and Development Costs	6
2.2.1 Depreciation of Building M4	11
2.3 Treatment of Water Costs.....	11
2.4 Income Tax Expense	13
3.0 Process to Establish Permanent Rates.....	14
4.0 Other Issues Arising	16
4.1 Direction on PCA Costs	16

APPENDICES

APPENDIX A LIST OF EXHIBITS

APPENDIX B SUMMARY OF DIRECTIVES

Executive Summary

On October 31, 2023, Creative Energy Mount Pleasant Limited Partnership (CEMP) filed an application with the British Columbia Utilities Commission for approval of rates on an interim and refundable basis effective January 1, 2024, through December 31, 2026 (Test Period) for the Mount Pleasant District Cooling System (DCS) for the provision of cooling service to the Main Alley Development (Application). Upon full build-out of the Main Alley Development, the Mount Pleasant DCS will serve five buildings, buildings M1 to M5. The Mount Pleasant DCS is forecast to be built in four phases with completion and service to all five buildings in 2029. As of the date of the Application, CEMP has completed Phase 1, providing service to buildings M1, M2 and M3, and expects to complete Phase 2, to connect building M4, during the Test Period. During the proceeding, CEMP clarified that it has reduced the scope of Phase 3 because it no longer expects the redevelopment of building M3 to proceed due to market conditions. Phase 4 of the project is when building M5 is to be connected.

CEMP's rates consist of a capacity charge, which recovers fixed costs that do not vary with consumption, and a variable charge, which recovers water and electricity costs on a flow-through basis. The capacity charge is calculated using a rate design that includes a 25-year levelization period and a Revenue Deficiency Deferral Account (RDDA) to record the annual difference between the revenue at the approved capacity charge and the approved forecast cost of service. By Order G-350-23, the BCUC approved the capacity charge and variable charge, as set out in Appendix B to the Application, on an interim and refundable/recoverable basis, effective January 1, 2024.

CEMP updated the rates for approval several times during the proceeding; the Panel considers those that CEMP filed in its responses to the BCUC's third information request (IR) as CEMP's final requested rates. CEMP is seeking a 3.4 percent rate decrease in 2024, a 2.1 percent rate increase in 2025, and a 2.0 percent rate increase in 2026.

The Panel has reviewed the various components of the revenue requirement and is satisfied with CEMP's methodology for calculating the capacity charge. Further, the Panel is persuaded that water treatment costs should no longer be considered variable costs because the Mount Pleasant DCS is a closed-loop system, and such costs do not correlate to energy usage. Accordingly, **the Panel directs CEMP to recover water chemical costs through the capacity charge, effective January 1, 2024.** The Panel finds CEMP's forecast revenue requirements to be reasonable for setting rates for the Mount Pleasant DCS for the Test Period, subject to the directives and determinations in this decision. In addition, **the capacity charge and RDDA additions over the Test Period are approved, as presented in the rates model filed in response to BCUC IR No. 3, subject to the determinations made throughout this decision and subject to the BCUC determinations in the Generic Cost of Capital (GCOC) Stage 2 Decision that impact CEMP's deemed capital structure and return on equity. CEMP is directed to maintain the 2024 capacity charge approved on an interim basis by Order G-350-23, pending the BCUC's decision on the GCOC Stage 2 proceeding. The Variable Charge is approved on a permanent basis effective January 1, 2024 through December 31, 2026.**

CEMP has advanced costs that were previously part of Phase 3 into the Test Period as part of Phase 2. CEMP explained during the proceeding that this was necessary because two of the three chillers that serve the Mount Pleasant DCS had experienced catastrophic failures and that it anticipates the third chiller will also fail. CEMP

submits that replacing the chillers in the Test Period instead of Phase 3 is required to maintain a safe and reliable plant. The Panel finds the forecast capital and development costs for the Test Period to be reasonable.

Finally, the Panel finds that CEMP was not properly prepared for this proceeding, which has caused delays and extra process, the consequences for which should not be imposed entirely on ratepayers. We find that the shareholders should bear a portion of any PCA costs that are eventually awarded. **The Panel directs CEMP to record 85 percent of any costs awarded to the CEC for its participation in this proceeding for recovery from CEMP's ratepayers, with the remaining 15 percent being to the account of CEMP's shareholder.**

1.0 Introduction

On October 31, 2023, Creative Energy Mount Pleasant Limited Partnership (CEMP) filed an application with the British Columbia Utilities Commission for approval of rates on an interim and refundable basis effective January 1, 2024 through December 31, 2026 (Test Period) for the Mount Pleasant District Cooling System (DCS) for the provision of cooling service to the Main Alley Development (Application). This decision addresses the Panel's final determinations on the Application.

1.1 Background and History

CEMP is a wholly owned subsidiary of Creative Energy Developments Limited Partnership,¹ a private energy infrastructure business with a focus on district energy system service in urban areas throughout North America including in British Columbia.²

In 2020, the BCUC granted a Certificate of Public Convenience and Necessity (CPCN) to CEMP authorizing it to acquire and operate the Mount Pleasant DCS, including specific extensions, renovations, expansions and upgrades, to provide cooling to the Main Alley Development.³ Upon full build-out of the Main Alley Development, the Mount Pleasant DCS will serve five buildings: four commercial/light industrial use buildings (buildings M1 to M4) and one residential building (building M5).⁴ The Mount Pleasant DCS is forecast to be built in four phases, with completion and service to all five buildings in 2029.⁵ The BCUC attached terms to the CPCN, including one that limits CEMP from proceeding with the third phase until it has reached certain milestones in regards to two of the five buildings, M3 and M5.⁶

In 2022, the BCUC approved the initial rates and rate design, comprising a levelized fixed capacity charge and a variable charge, for Phase 1 of the Mount Pleasant DCS from February 1, 2021 to December 31, 2023 (2021-2023 RRA Decision).⁷ The BCUC also approved a Revenue Deficiency Deferral Account (RDDA) to record the annual difference between the revenue at the approved capacity charge and the approved forecast cost of service, excluding water and electricity costs.

As of the date of the Application, CEMP has completed Phase 1 of the Mount Pleasant DCS, providing service to buildings M1, M2 and M3, and expects to complete Phase 2, to connect building M4, during the Test Period.⁸ During the proceeding, CEMP clarified that it has reduced the scope of Phase 3 because it no longer expects the

¹ CEMP Application for a CPCN to Acquire, Operate and Expand a Thermal Energy System for Cooling in the Main Alley Development (CPCN Proceeding), Exhibit B-5, BCUC IR 38.1.

² CPCN Proceeding, Exhibit B-1, Section 1.3, p. 3.

³ Order C-5-20 dated December 3, 2020.

⁴ Exhibit B-1, p. 2; Exhibit B-4, BCUC IR 2.4.

⁵ Exhibit B-1, Table 2, pp. 3–4.

⁶ Order C-5-20, Directive 1(b).

⁷ CEMP Application for Rates for the Mount Pleasant District Cooling System (2021-2023 RRA Proceeding), Decision and Order G-242-22 (2021-2023 RRA Decision).

⁸ Exhibit B-1, p. 1, Table 2, pp. 3–4; Exhibit B-5, CEC IR 2.8.

redevelopment of building M3 to proceed due to market conditions.⁹ Phase 4 of the project is when building M5 is to be connected.¹⁰

In 2021, the BCUC initiated a Generic Cost of Capital (GCOC) proceeding, in which CEMP is a registered intervener. The purpose of that proceeding is to establish a method to determine the appropriate cost of capital for regulated utilities in British Columbia (BC), as well as to review the appropriateness of continuing to use a benchmark utility.¹¹ On September 5, 2023, the BCUC issued its decision on the GCOC Stage 1 proceeding¹² and determined the deemed capital structure and allowed return on equity (ROE) of FortisBC Energy Inc. (FEI) and FortisBC Inc. (FBC). As part of that decision, the BCUC directed that all other utilities using the benchmark utility to set their rates (which includes CEMP) will have interim rates, effective January 1, 2024, on a refundable or recoverable basis, pending the BCUC's final decision on the GCOC Stage 2 proceeding,¹³ which is currently underway.¹⁴

1.2 Application and Regulatory Process

CEMP requests approval of the following rates on an interim and refundable basis for the Test Period:

- (i) A levelized capacity charge [\$ /kilowatt (kw)/month] as set out in Appendix B to the Application to recover the forecast capital and fixed operating costs that do not vary with energy consumption from each building customer based on their peak design capacity (Capacity Charge); and
- (ii) A variable charge [\$ /megawatt-hour (MWh)] as set out in Appendix B to the Application to recover the actual electricity and water costs on a flow-through basis per unit of actual energy consumption (Variable Charge).

By Order G-350-23, the Panel approved the Capacity Charge and Variable Charge on an interim and refundable/recoverable basis, effective January 1, 2024. Any variance between the interim and permanent rates, as determined at the time the BCUC renders its final decision on the Application, is subject to refund or recovery from ratepayers, with interest at the average prime rate of CEMP's principal bank for its most recent year.¹⁵

CEMP is classified as a Stream B TES public utility¹⁶ under the BCUC Thermal Energy System (TES) Framework Guidelines, for which the approval of rates is governed by sections 58 to 61 and 90 of the *Utilities Commission Act* (UCA).¹⁷

⁹ Exhibit B-4, BCUC IR 2.3; Exhibit A2-1, pp. 4–5.

¹⁰ Exhibit B-1, Table 2, pp. 3–4.

¹¹ BCUC Generic Cost of Capital Stage 1 (GCOC Stage 1), Decision and Order G-236-23 dated September 5, 2023 (GCOC Stage 1 Decision), p. 1.

¹² GCOC Stage 1 Decision, Executive Summary, p. i.

¹³ GCOC Stage 1 Decision and Order G-236-23, Directive 4.

¹⁴ BCUC Generic Cost of Capital Stage 2. Proceeding's record available at <https://www.bcuc.com/OurWork/ViewProceeding?applicationid=1148>

¹⁵ Order G-350-23, Directive 2.

¹⁶ BCUC Generic Cost of Capital Proceeding (Stage 2) Decision dated March 25, 2014, p. 116.

¹⁷ *Utilities Commission Act*, RSBC 1996, c. 473.

The regulatory process included public notice of the Application, intervenor registration, letters of comment, three rounds of BCUC and intervenor information requests (IRs), supplemental information and final and reply arguments.¹⁸ The BCUC limited the scope of both the second and third round of IRs.

The Commercial Energy Consumers Association of British Columbia (the CEC) registered as the sole intervenor and actively participated in the proceeding. The BCUC did not receive any letters of comment.

As part of its IR No. 2 responses, CEMP submitted an updated rates model, which included substantial changes compared to the rates model filed with the Application and an amended request for approval of its rates for the Test Period (Evidentiary Update). The updated rates model was both unexpected and substantive and the Panel considered that further regulatory process including a third round of IRs was required to allow parties sufficient opportunity for discovery of evidence.

CEMP filed several iterations of its rates model and tariff pages during the proceeding. The Panel considers the version that CEMP filed in its responses to BCUC IR No. 3 (Revised Rates Model)¹⁹ to be the most up to date, and the basis for CEMP’s requests for approval in this Decision. While CEMP filed an updated rates model and tariff pages after BCUC IR No. 3 as part of its supplemental information dated June 24, 2024, it is unclear whether CEMP intended these to be further revisions to its requested approvals. Regardless, the Panel notes that the only difference between the rates filed as part of CEMP’s responses to BCUC IR No. 3 and those filed as part of supplemental information relates to income tax expense, which is addressed in Section 2.4 of this decision.

Section 2 of this decision sets out the overall determination on the revenue requirement and rates and addresses various elements of CEMP’s revenue requirements and several issues that arose regarding depreciation, treatment of water costs and income tax expense. Section 3 addresses the process to establish permanent rates. Section 4.1 addresses the recovery of Participant Cost Awards (PCA) costs for this proceeding.

2.0 Revenue Requirements and Rates

The table below is a compilation of the rate components, for which CEMP seeks approval.

Table 1:²⁰ Summary of Revenue Requirement Components

	2023 Approved	2024 Original Forecast	2024 Revised Forecast	2025 Revised Forecast	2026 Revised Forecast
Capacity Charge (\$/kW/mo)	30.04	28.96	29.01	29.61	30.21
Year over Year Change (%)		-3.6%	-3.4%	2.1%	2.0%
Fixed Cost of Service (\$)	456,369	1,074,592	1,262,300	1,331,690	1,351,259

¹⁸ Orders G-350-23, G-12-24, G-57-24, G-114-24, G-129-24, and G-184-24.

¹⁹ Exhibit B-9, Excel Attachment “CEMP-UpdatedRatesModel-IR3-Attachment” (Attachment), Tab “Rates Model” (Revised Rates Model).

²⁰ Table compiled based on values taken from: Exhibit B-1, Excel Attachment “CEMP Rates Model - Filed”, Tab “Rates Model” for the “2024 Original Forecast” column of Table 1; Exhibit B-9, Attachment, Revised Rates Model for the “2024 Revised Forecast”, “2025 Revised Forecast” and “2026 Revised Forecast” columns of Table 1; and CEMP’s Compliance Filing to Order G-242-22, Excel Attachment “CEMP Rates Compliance”, Tab “Rates Model” for the “2023 Approved” column of Table 1. The BCUC corrected figures marked with a double asterisk (**) to ensure mathematical accuracy.

Variable Cost of Service (\$)	54,032	86,750	74,580	88,459	91,113
Total Cost of Service (\$)	510,401	1,161,342	1,336,880	1,420,149	1,442,372
Year over Year Change (%)		127.5%	161.9%	6.2%	1.6%
RDDA Addition (Decrease) (\$)	(131,295)	92,792	417,664	327,760	327,250
RDDA Ending Balance* (\$)	(72,000)	20,792**	345,664	673,424	1,000,675

*Exclusive of applicable carrying costs at CEMP's approved Weighted Average Cost of Capital (WACC).²¹

The Capacity Charge recovers fixed costs that do not vary with consumption, such as depreciation, cost of capital, and operating and maintenance expenses. The Capacity Charge is calculated using the rate design approved in the 2021-2023 RRA Decision, which includes a 25-year levelization period and an RDDA to record the difference between the approved forecast for each of the fixed cost of service and Capacity Charge revenue.²²

A separate Variable Charge was approved in the 2021-2023 RRA Decision to recover water and electricity costs on a flow-through basis.²³

The primary drivers of the change in cost of service are: depreciation expenses, costs of debt and equity, income tax expenses, maintenance expenses, including water chemical costs, and corporate overhead costs.²⁴

Positions of the Parties

The CEC states that it generally finds the CEMP proposal to be acceptable and recommends that the BCUC approve it, subject to its recommendations, addressed below, regarding the capacity charge in buildings M1 and M3, project costs and water costs.²⁵

Panel Determination

The Panel approves the Capacity Charge and the additions to the RDDA over the Test Period presented in the Revised Rates Model, subject to the determinations made throughout this decision and subject to the BCUC determinations in the GCOC Stage 2 Decision that impact CEMP's deemed capital structure and return on equity. The Capacity Charge approved herein will remain interim, on a recoverable or refundable basis; as we discuss in Section 3.0, CEMP's deemed cost of capital will be updated once the BCUC GCOC Stage 2 proceeding is finalized, and then the Capacity Charge can be adjusted to reflect that new deemed cost of capital and made permanent. **The Variable Charge is approved on a permanent basis effective January 1, 2024 through December 31, 2026.**

The Panel has reviewed the various components of the revenue requirement. We find CEMP's forecast revenue requirements as set out in Table 1 reasonable for setting CEMP's rates for the Test Period for the Mount Pleasant DCS. We are satisfied with CEMP's methodology for calculating the Capacity Charge and, as we note below, CEMP will supply additional information in its next revenue requirements application (RRA) to ensure the methodology continues to be reasonable. Although CEMP's forecast capital and development costs have increased by almost 20 percent since the BCUC granted the CPCN in 2022, we are satisfied with the explanations

²¹ CEMP 2021-2023 RRA Decision, Directive 3.

²² Exhibit B-1, p. 13; CEMP 2021-2023 RRA Decision, p. 16.

²³ Exhibit B-1, p. 5; CEMP 2021-2023 RRA Decision, p. 18.

²⁴ Exhibit B-9, Attachment, Revised Rates Model.

²⁵ CEC Final Argument, p. 4.

that CEMP has provided for this increase. The Panel is persuaded that water treatment costs should no longer be considered variable costs because the Mount Pleasant DCS is a closed-loop system and such costs do not correlate to energy usage. Finally, we are satisfied that the additions to the RDDA over the Test Period, as presented in Table 1, are reasonable.

In the following subsections, the Panel examines elements of CEMP’s revenue requirements and the issues that arose during the proceeding. Section 2.1 examines the design peak capacity for buildings M1 and M3; CEMP states that the design peak capacity is the overall driver of the fixed costs of the Mount Pleasant DCS.²⁶ Section 2.2 examines capital and development costs of the Mount Pleasant DCS and addresses specific items raised by the intervenor or considered necessary for discussion based on the Panel’s review. Sections 2.2.1, 2.3 and 2.4 examine depreciation expense, treatment of water costs and income tax expense, respectively.

2.1 Uncertainty in Design Peak Capacity for Buildings M1 and M3

CEMP states that the Capacity Charge recovers all costs of the Mount Pleasant DCS that do not vary with energy consumption, that is, the cost of service excluding variable electricity and water costs.²⁷ The Capacity Charge is invoiced in accordance with the design peak capacity of each building, which is calculated by multiplying the building’s floor area (m2) and the peak cooling energy use intensity factor (EUI, W/m2).²⁸ Table 2 below shows the design peak capacity for each building in the Main Alley Development during the Test Period.

Table 2: Capacity Charge Billing Determinants²⁹

Building	Design Peak Capacity (kW)
M1	320
M2	840
M3	470*
M4	1,195 (797 for the year 2024) *

In the 2021-2023 RRA Proceeding, CEMP explained that there is greater uncertainty in the design peak capacity requirements of existing buildings M1 and M3 as compared to new buildings, such as M2 and M4. CEMP suggested that a peak cooling EUI of either 60 W/m2 or 75 W/m2 could be reasonably used to determine design capacity requirements because both came from reputable sources.³⁰ CEMP decided to use an EUI of 60 W/m2 to maintain lower rates for buildings M1 and M3 and noted that based on its operational experience, the demand for buildings M1 and M3 is lower than expected.³¹ Given that the billing determinants for the Capacity Charge are equal to the design peak capacity for each building, the Capacity Charge would increase if CEMP used an EUI of 75 W/m2 to determine the peak capacity requirements instead of 60 W/m2.³² The BCUC, recognizing the need for further examination, directed CEMP to conduct an assessment of actual building demand data to confirm that 60 W/m2 continues to be reasonable, and to include the results as part of its RRA for the next rate-

²⁶ Exhibit B-1, p. 11.

²⁷ Exhibit B-1, p. 11.

²⁸ Exhibit B-1, p. 11; CEMP 2021-2023 RRA Decision, p.7.

²⁹ Table compiled based on Exhibit B-1, p. 12. Values marked with an asterisk (*) were updated based on Exhibit B-9, BCUC IR 16.1.

³⁰ 2021-2023 RRA Proceeding, Exhibit B-7, BCUC IR 17.2 and Exhibit B-11, BCUC IR 34.4.

³¹ 2021-2023 RRA Proceeding, Exhibit B-11, BCUC IR 34.4.

³² CEMP 2021-2023 RRA Decision, p.8.

setting period effective January 1, 2024 (i.e. this RRA).³³ Despite the BCUC's direction, CEMP did not provide its further analysis or assessment for buildings M1 and M3 in the Application.

CEMP states that it did not complete the analysis on the design peak capacity for buildings M1 and M3 because the existing piping arrangement and controls system do not allow for measurement of energy use in these buildings.³⁴ Additionally, CEMP states it is investigating options for installing energy meters to buildings M1 and M3 to be able to conduct the analysis of energy use.³⁵

Positions of the Parties

The CEC agrees that the design peak capacity of each building is a suitable indicator of cost causation. The CEC considers that the installation of energy meters to buildings M1 and M3 would be valuable in comparing actual to forecast energy use and the appropriate design peak capacity and recommends that the BCUC direct CEMP to investigate the options for energy metering and to report on this matter within one year.³⁶

Panel Determination

The Panel acknowledges that CEMP is exploring options for energy metering in buildings M1 and M3, which will permit it to analyze the actual energy use of these buildings. We accept that this analysis will be useful because it will support determining whether an EUI of 60 W/m² continues to be reasonable for determining the design peak capacity for these buildings. **We direct CEMP to provide an update on the options for installing energy meters at buildings M1 and M3 in its next RRA.**

2.2 Capital and Development Costs

CEMP forecasts approximately \$11.362 million in capital and development costs for the Mount Pleasant DCS project.³⁷

As directed in the CPCN Decision³⁸, CEMP files semi-annual progress reports for the project.³⁹ The progress report dated October 17, 2023 indicated that the Mount Pleasant DCS forecast capital costs are nearly 20 percent higher than the forecast of \$9.2 million provided in both the CPCN Proceeding and the 2021-2023 RRA Proceeding. CEMP explains that the cost variance is primarily driven by: increased costs of labour and materials associated with unforeseen chiller replacements, higher construction costs for the distribution piping system and the energy transfer stations required to connect buildings M2 and M4, higher engineering costs for Phase 2 due to inflation, and piping upgrades being more complex than originally planned.⁴⁰

When CEMP acquired the assets, the Mount Pleasant DCS consisted of three chillers, Chiller #1, Chiller #2, and Chiller #3. CEMP explains that the three chillers work together to serve the full load served by the plant as opposed to serving a specific customer building.⁴¹ CEMP initially planned to replace the chillers as the project

³³ CEMP 2021-2023 RRA Decision, Directive 1.

³⁴ Exhibit B-4, BCUC IR 7.2.

³⁵ Exhibit B-4, BCUC IR 7.2.

³⁶ CEC Final Argument, p. 10.

³⁷ Exhibit B-1, Table 3, p. 7.

³⁸ CPCN Proceeding, Decision and Order C-5-20 (CPCN Decision).

³⁹ CPCN Decision, Directive 2.

⁴⁰ Exhibit A2-1, pp. 3-4.

⁴¹ Exhibit B-8, CEC IR 11.1; Exhibit A2-1, p. 2.

progressed (i.e. phased implementation) and prior to Phase 4 to have the capacity required to serve all customers of the Mount Pleasant DCS.⁴² Nevertheless, problems with the chillers occurred faster than anticipated, which accelerated the plans outlined in the CPCN Proceeding and the 2021-2023 RRA Proceeding.⁴³

CEMP explains that Chiller #1 experienced a catastrophic failure in 2022 and was replaced in Phase 1 of the project instead of Phase 3 as originally planned.⁴⁴ Replacement of Chiller #1 was approved in the 2021-2023 RRA Decision.⁴⁵ Chiller #2 also experienced a catastrophic failure in 2023 and CEMP expects to replace it in 2024 as part of Phase 2, instead of in Phase 3 as originally planned.⁴⁶ This is to ensure the cooling plant has sufficient capacity to serve the peak load required.⁴⁷ Chiller #3 remains in service and CEMP expects to replace it in either 2024 or 2025,⁴⁸ as it is likely to fail due to its age.⁴⁹

CEMP notes that the developer has postponed the redevelopment of building M3 indefinitely due to market conditions and accordingly, CEMP no longer expects this redevelopment to proceed.⁵⁰ Consequently, CEMP updated the total capital and development costs of the Mount Pleasant DCS project to remove approximately \$3.568 million of capital expenditures for Phase 3 that were solely attributed to the expansion and reconnection of building M3. This resulted in a reduced total forecast capital and development cost of the project of \$7.794 million.⁵¹ CEMP explains that \$1.398 million of capital and development costs from Phase 3 remain in the rates model and will enter service in the Test Period as part of Phase 2. These costs are for:

- Replacement of Chiller #3, which has exceeded its service life and requires a significant and costly overhaul to meet Technical Safety BC requirements and extend its service life by an additional two years. CEMP acknowledges that the replacement of Chiller #3 has an upfront cost of nearly 35 percent more than the cost of overhauling the chiller; however, a new chiller, with service life of 30 years (instead of two years), is needed to maintain the reliability of the energy centre.⁵²
- Installation of peripherals vital for the operation of new Chiller #2 to ensure CEMP maintains adequate control of flow and temperature of the chilled water from the cooling plant and support in meeting Technical Safety BC requirements for an unattended chiller plant. CEMP clarifies that it carried out similar control work for Chiller #1, as described in BCUC letter L-38-23.⁵³

CEMP states that the work described above is required to maintain a safe and reliable plant.⁵⁴ Although the capital and development costs associated with the work are now being incurred in the Test Period, instead of Phase 3 as previously planned, CEMP does not consider that advancing this capital and development work to

⁴² CPCN Decision, p. 18.

⁴³ Exhibit B-8, CEC IR 11.1; Exhibit A2-1, p. 1.

⁴⁴ Exhibit B-8, CEC IR 11.1; Exhibit A2-1, p. 1; CPCN Decision, Table 5, p. 18.

⁴⁵ CEMP 2021-2023 RRA Decision, p. 31.

⁴⁶ CPCN Decision, Table 5, p. 18; Exhibit B-5, CEC IR 2.3.

⁴⁷ Exhibit B-7, BCUC IR 15.1.

⁴⁸ Exhibit B-5, CEC IR 3.2; Exhibit B-7, BCUC IR 15.1.

⁴⁹ Exhibit B-9, BCUC IR 20.8.

⁵⁰ Exhibit B-5, CEC IR 2.3; Exhibit A2-1, pp. 4-5.

⁵¹ Exhibit B-7, BCUC IR 15.1; Exhibit B-9, Attachment, Revised Rates Model.

⁵² Exhibit B-7, BCUC IR 15.1.

⁵³ Exhibit B-9, BCUC IR 20.7; BCUC letter L-38-23, dated July 26, 2023.

⁵⁴ Exhibit B-8, CEC IR 11.4.

Phase 2 means that CEMP is proceeding with Phase 3 of the project.⁵⁵ CEMP submits that it did not anticipate the catastrophic failure of the chillers or the developer's decision to delay the redevelopment plan for building M3.⁵⁶ CEMP explains that the decision to postpone the redevelopment was a result of the commercial office market decline as a fallout of the COVID-19 pandemic and could not have been foreseen by either the developer or CEMP. CEMP maintains that it should not be held accountable for these events; however, it recognizes its duty to ensure due diligence in accommodating such unforeseen circumstances.⁵⁷

CEMP explains that the replacement chillers [Chillers #1 and #2] have been sized to meet the expected loads that the Mount Pleasant DCS will be required to serve, while meeting Technical Safety BC requirements.⁵⁸ CEMP states that the possible load growth due to the expansion of building M3 was considered in selecting the chiller sizes, though it was not given much weight. Chiller sizing is revisited prior to ordering and Chiller #3 will be sized based on the loads expected to be serviced by the Mount Pleasant DCS at the time of order.⁵⁹ CEMP states that selection of appropriate chiller sizes for a central energy plant is a complex exercise that must weigh the immediate cost and impact to customers against the long-term plant service requirements, including the requirement to serve all customers with the appropriate load.⁶⁰ Further, CEMP submits that it continues to work with the developer to confirm the future loads for building M5, as this information is required to confirm the chiller sizes required for the plant. CEMP notes that it will likely use preliminary information available for building M5 to select and purchase Chiller #3, since building M5 is not yet in the detailed design stage. CEMP states that it will provide updates to the BCUC in upcoming progress reports.⁶¹

Positions of the Parties

The CEC states that it is satisfied with CEMP's confirmation that no excess capacity has been installed at this time, since the total capacity of the replacement chillers aligns with the expected cumulative peak load for all the buildings.⁶² However, the CEC notes its concerns with the significantly higher fixed costs than were anticipated in the original CPCN. The CEC's concerns are exacerbated by the cost and associated rate increases arising from the catastrophic failure of chillers, and the reduction of demand from the cancellation of the planned redevelopment in building M3. It notes that this leads to the potential for unnecessarily high rates for the Mount Pleasant DCS. The CEC accepts, however, that Creative Energy has appropriately accounted for the cost reductions arising from the revisions to building M3, and that it will also do so when purchasing Chiller #3.⁶³

The CEC notes that the developer specifies the billing determinants for each building, and these assume full occupancy. The CEC states that the fact that CEMP does not have responsibility for managing forecast load and design capacity but is instead only responsive to the developer, leads it to wonder whether ratepayers are exposed to unnecessary costs. The CEC is also critical that CEMP has not negotiated costs from the developer

⁵⁵ Exhibit B-9, BCUC IR 20.8.

⁵⁶ CEMP Reply Argument, p. 6.

⁵⁷ CEMP Reply Argument, p. 6.

⁵⁸ Exhibit B-8, CEC IR 11.1.

⁵⁹ Exhibit B-8, CEC IR 11.1.

⁶⁰ Exhibit B-9, BCUC IR 20.1.

⁶¹ CEMP Reply Argument, p. 8.

⁶² CEC Final Argument, p. 6.

⁶³ CEC Final Argument, pp. 19–20.

when targets and plans are not met, for example fixed costs or building occupancy, because these are not costs that CEMP and its ratepayers should bear.⁶⁴

As a result, the CEC recommends that the Panel remind CEMP that it is supposed to be looking out for the interests of its customers, which should include the future ratepayers, and should not be taking on the risks and uncertainties of the developer.⁶⁵ It also recommends that the Panel should “consider out of this proceeding communicating to the GCOC Stage 2 the issue of the utility unnecessarily taking on developer risks and not adequately protecting customers from risks being brought into the utility’s future ratepayers.”⁶⁶

In response to the CEC, CEMP notes that it submitted the agreements regarding the Mount Pleasant DCS that it signed with the developer for approval with the CPCN and that these agreements do not contain any contractual mechanisms to secure payment from the developer if its future developments do not manifest on time or at all. CEMP also states that it does not have control over the timing of future loads, because these are influenced by external factors such as market dynamics and broader economic conditions. CEMP submits that it has acted prudently to “right size” the chiller plant based on the information provided by the developer and has not over-installed capacity. CEMP continues to manage the costs associated with the Mount Pleasant DCS to reduce the cost to customers while managing the operating risk of an aging plant.⁶⁷

Panel Determination

The Panel finds the forecast capital and development costs for the Test Period to be reasonable. In addition, the Panel is satisfied that CEMP has adequately explained the forecast cost variance between the capital costs outlined in the Application compared to those in the CPCN and the 2021-2023 RRA Proceedings. We accept that the failures of Chillers #1 and #2 were extraordinary and contributed to the variance of forecast capital costs of the project.

In addition to considering the cost variance, we need to address the following: (i) whether CEMP’s plans for the replacement of Chiller #2 and Chiller #3, along with the associated controls work in the Test Period, indicate that it is proceeding to Phase 3, despite BCUC Directive 1(b) of CPCN Decision and Order C-5-20, which states that CEMP may not proceed with Phase 3 until it has agreed in writing with the Owner on target in-service dates for the expansion and renovation of building M3 and for building M5; and (ii) whether CEMP is overbuilding the Mount Pleasant DCS.

The Panel notes that, according to the original plans, CEMP intended to replace Chillers #1, #2, and #3 before Phase 4, to improve the Mount Pleasant DCS reliability and increase capacity to meet the required design peak loads of all customers, that is, buildings M1 to M5, including expansion and renovation of building M3. However, the Panel understands that due to the unforeseen failure of Chillers #1 and Chiller #2, and the anticipated failure of Chiller #3 due to its age, CEMP had to revise its chiller replacement timeline to maintain safe and reliable service to customers, regardless of whether the expansion of building M3 occurs. We are persuaded that the expenditures from Phase 3 that will enter service in the Test Period are not related to the expansion and reconnection of building M3, which was originally a key component of Phase 3 scope. Further, we are satisfied that CEMP’s decision to replace, rather than overhaul, Chiller #3 is reasonable, because the service life of a new

⁶⁴ CEC Final Argument, p. 9.

⁶⁵ CEC Final Argument, p. 15.

⁶⁶ CEC Final Argument, p. 19.

⁶⁷ CEMP Reply Argument, p. 8.

chiller is substantially longer than that of overhauled Chiller #3. Therefore, **the Panel finds that the replacement of Chiller #3 in the Test Period is reasonable, along with the associated controls work. The Panel finds that CEMP is not proceeding with Phase 3 of the project at this time.**

The Panel notes that this determination, and the fact that Phase 3 may never proceed, may impact CEMP's compliance with Directive 1(a) of CPCN Decision and Order C-5-20, which requires CEMP to conduct further public consultation regarding the project prior to proceeding with Phase 3.

The Panel questions whether Directive 1(a) should be rescinded, or since there is no evidence that Phase 4 will not proceed, varied to require, for example, CEMP to conduct further public consultation regarding the project prior to Phase 3 or any future Phase. This matter was not addressed during the proceeding. **Therefore, the Panel directs CEMP to provide submissions in its next RRA on whether Directive 1(a) of Order C-5-20 should be varied or rescinded and if not, why not.**

The fact that the developer is unlikely to proceed with Phase 3 raises to the question of whether CEMP is overbuilding the Mount Pleasant DCS by replacing the chillers as planned, rather than selecting smaller chillers to reflect that Phase 3 is no longer in scope. CEMP asserts that it is not overbuilding the Mount Pleasant DCS, and that although CEMP considered the expansion of building M3 when selecting the new chiller size, the load from that building is but one factor in an otherwise complex exercise. Further, CEMP notes that the Mount Pleasant DCS is currently sized to provide the required peak loads and that it will only consider the known loads when it selects the size for new Chiller #3. The Panel is satisfied that CEMP is not overbuilding the Mount Pleasant DCS at this time and expects that Chiller #3 will be sized appropriately.

The CEC observes that the increased costs, combined with the loss of load demand from expanded building M3, could translate into unnecessarily higher rates for the Mount Pleasant DCS. The CEC suggests that CEMP could have avoided these higher costs if it had negotiated better terms with the developer such as, for example, that the developer bears the risk when targets and plans are not met. The Panel acknowledges that the higher costs of the Mount Pleasant DCS and the loss of demand from an expanded building M3 could lead to higher rates; however, we do not accept the CEC's characterization of rates as being 'unnecessarily higher.' The Panel notes that CEMP was granted a CPCN to construct the Mount Pleasant DCS and is moving forward according to that approval. In the Panel's view, it would be impractical to revisit what CEMP could have done differently to mitigate higher costs and potential higher rates.

We cannot help but observe, however, that CEMP could have done a better job in presenting the Application. For example, it could have addressed in the Application the 20 percent cost variance, much of which seems attributable to problems with the chillers. Similarly, the Application should have tackled the decision not to proceed with the expansion of building M3 and the resulting capital cost update, instead of waiting for the issue to arise during IRs. Although CEMP indicated that it planned to submit an evidentiary update once final Phase 2 costs were known, its silence on these matters in the Application meant that neither the Panel nor the intervener could know whether CEMP was aware of these issues.

2.2.1 Depreciation of Building M4

CEMP has included depreciation expense of \$124,453⁶⁸ related to building M4 assets in its 2024 cost of service. CEMP submits that building M4 assets are expected to enter service in May 2024⁶⁹ and depreciation for building M4 is thus pro-rated to reflect this in-service date.⁷⁰ However, in the 2021-2023 RRA Decision CEMP was directed to “... depreciate the capital and development costs for the Mount Pleasant DCS on a straight-line basis over 25 years starting in the fiscal year following when the asset is placed into service.”⁷¹

Positions of the Parties

The CEC states that it finds acceptable CEMP’s adjustment of the depreciation for building M4 to reflect the in-service date of May 2024.⁷²

Panel Determination

The Panel denies the recovery of the 2024 depreciation for building M4 of \$124,453 and directs CEMP to adjust its rates model and revenue requirements for 2024 to remove the depreciation associated with building M4 as part of the final compliance filing for this proceeding. CEMP indicates that it expects this building to go into service in 2024. Therefore, consistent with its own depreciation policy as well as prior BCUC direction, it must depreciate the building in the fiscal year following when the asset is placed into service, instead of prorating an amount for the year the asset goes into service.

2.3 Treatment of Water Costs

In this decision, and based on the evidence submitted by CEMP, the following terms are used for the two types of water costs included in CEMP’s revenue requirements:

- Make-up water costs – the cost of water required in a closed-loop system.⁷³ The final amount included in the revenue requirement is \$nil over the Test Period, because CEMP does not pay for make-up water.⁷⁴ CEMP does not have a timeline for when it expects to incur these costs from Westbank, as that would require the addition of water metering to the plant, for which there is no current plan.⁷⁵
- Water chemical costs – the cost of chemicals used to treat the water required in a closed-loop system.⁷⁶ Note, in this proceeding, the term water chemical costs is used interchangeably with chemical costs and water treatment costs. The final amount included in the revenue requirement is \$111,019 over the Test Period.⁷⁷

In the 2021-2023 RRA Decision, the BCUC approved CEMP to recover water chemical costs on a flow through basis as part of the Variable Charge. The BCUC noted that the “evidence was ambiguous with respect to the treatment of water chemical costs; whether these should be treated as a fixed component of the capacity

⁶⁸ Exhibit B-9, Attachment, Revised Rates Model, Excel cell K227.

⁶⁹ Exhibit B-4, BCUC IR 2.2.

⁷⁰ Exhibit B-7, p. 1.

⁷¹ CEMP 2021-2023 RRA Decision, Directive 6.

⁷² CEC Final Argument, p. 13.

⁷³ Exhibit B-7, BCUC IR 12.5.

⁷⁴ Exhibit B-7, BCUC IR 12.1.

⁷⁵ Exhibit B-4, BCUC IR 11.5.

⁷⁶ Exhibit B-7, BCUC IR 12.1.

⁷⁷ Exhibit B-9, BCUC IR 17.2.1. Calculated as: \$36,252 + \$37,013 + \$37,754 = \$111,019.

charge or a flow-through component of the variable charge.” Accordingly, the BCUC directed CEMP to address in its next RRA whether water chemical costs should continue to be part of the Variable Charge rather than the Capacity Charge. Further, the BCUC approved CEMP to use the RDDA to record the annual difference between revenue at the approved Capacity Charge and the approved forecast cost of service, excluding however, water and electricity costs.⁷⁸

As part of the Application, CEMP now includes water chemical costs as part of maintenance expense in the fixed cost of service for the Test Period, which is recovered through the Capacity Charge.⁷⁹ Water chemical costs are the costs of chemicals to maintain the water quality required for the safe and reliable operation of the cooling plant.⁸⁰ CEMP explains that for a closed-loop system such as the Mount Pleasant DCS water chemical costs are not easily correlated to energy usage. Instead, water chemical costs are driven by other factors, including preventing internal corrosion and biofilm/sludge build up on system water pipes, treatment to prevent Legionella disease, and compliance with Metro Vancouver bylaws.⁸¹ CEMP submits that due to the nature and design of the Mount Pleasant plant, water chemical costs are fixed costs and should be treated as part of the annual operations costs for the plant.⁸² This is different from other district energy systems, where water chemical costs are typically based on energy usage and therefore recovered through a variable charge.⁸³ Energy is generated in these systems by boilers and both the make-up water and the chemicals used to treat the water in the system are based on the blowdown required to maintain the desired water chemistry and recovery of condensate from the system.⁸⁴ When energy use is high in these other district energy systems, the amount of blowdown from the boilers increases and more make-up water and chemical treatment are required, thereby correlating these costs to energy use.⁸⁵

Positions of the Parties

The CEC submits that the BCUC should direct CEMP to incorporate water treatment costs as a variable cost.⁸⁶

In reply, CEMP emphasizes that due to the plant design, water treatment costs are fixed costs that should be part of the annual operating costs for the plant recovered through the Capacity Charge.⁸⁷

Panel Determination

In this section, the Panel addresses two issues regarding the treatment of water chemical costs. First, we address whether these costs should be part of the Variable Charge, as the BCUC directed in the 2021-2023 RRA Decision, or whether water chemical costs should now be part of the maintenance expense in the fixed cost of service, which is recovered through the Capacity Charge. That leads to the second issue, being the impact to Directive 3 of Order G-242-22, which approved the RDDA in the last RRA decision. The Panel acknowledges that CEMP does not explicitly request approval; however, we interpret its submission on this matter as a request to

⁷⁸ CEMP 2021-2023 RRA Decision, Directive 3.

⁷⁹ Exhibit B-9, Attachment, Revised Rates Model.

⁸⁰ CEMP Final Argument, p. 8.

⁸¹ Exhibit B-7, BCUC IR 12.5.

⁸² CEMP Reply Argument, p. 9.

⁸³ Exhibit B-4, BCUC IR 11.3.

⁸⁴ Exhibit B-7, BCUC IR 12.5.

⁸⁵ Exhibit B-7, BCUC IR 12.5.

⁸⁶ CEC Final Argument, p. 17.

⁸⁷ CEMP Reply Argument, p. 9.

vary the RDDA treatment approved in the last RRA decision and recover water treatment costs through the Capacity Charge as opposed to the flow through Variable Charge.

CEMP makes a compelling case that the Mount Pleasant DCS water chemical costs should be treated as part of its fixed costs. The Panel accepts that since the Mount Pleasant DCS is a closed-loop system, water chemical treatment is driven by the need to prevent corrosion and formation of biofilm in equipment and piping and therefore does not vary with energy use. As CEMP explains, this is different from other Creative Energy systems that rely on boilers to generate energy and where higher energy usage leads to higher make-up water requirements and consequently higher chemical treatment. Accordingly, **the Panel directs CEMP to recover water chemical costs through the Capacity Charge, effective January 1, 2024. In addition, the Panel directs CEMP to ensure that the Variable Charge records only electricity and make-up water costs, as billed by the City of Vancouver or the developer, and not water chemical or water treatment costs. The Panel also directs CEMP to report its actual water chemical costs and provide an analysis explaining any variance(s) between forecast and actual water chemical costs for each year of the Test Period in its next RRA.**

In addition, **effective January 1, 2024 CEMP is approved to continue use of the RDDA, over a 25-year levelization period beginning February 1, 2021 and attracting interest at CEMP's weighted average cost of capital, to record the difference between the annual revenue at the approved Capacity Charge and the approved annual forecast cost of service, excluding make-up water and electricity costs.** For clarity, this directive will not impact the historical balances recorded in the RDDA (i.e. from the 2021-2023 RRA test period), but rather limits the types of water costs that are excluded from being recorded in the RDDA from January 1, 2024 onwards to only exclude make-up water costs.

2.4 Income Tax Expense

CEMP has included income tax expenses of \$93,821, \$117,622 and \$125,831 in its revenue requirements for 2024, 2025 and 2026, respectively.⁸⁸ Based on the information contained in the Revised Rates Model, CEMP forecasts to be in a tax loss position for each year of the Test Period.⁸⁹

CEMP confirms that as a limited partnership, it has no income tax liability or obligation because CEMP as a partnership does not pay income taxes.⁹⁰ CEMP states that the income earned by the partnership is ultimately taxed at the shareholder level and that the income tax amounts included in its rates model are deemed numbers calculated by applying a 27 percent tax rate to CEMP's pre-tax cost of equity.⁹¹ During the proceeding, CEMP explained that it had overlooked adjustments for depreciation and capital cost allowance (CCA) and recalculates its income tax expenses to reflect these adjustments: \$49,376, \$80,048 and \$66,025 for 2024, 2025 and 2026, respectively.⁹² The BCUC asked CEMP to explain the appropriateness of recovering income tax from ratepayers as a limited partnership that does not have any income tax liability or obligation; however, CEMP did not provide a response to this portion of the BCUC's information request.⁹³

⁸⁸ Exhibit B-9, Attachment, Revised Rates Model, Excel row 399.

⁸⁹ In 2024, 2025 and 2026, CEMP forecasts tax losses of \$(251,945), \$(39,515), and \$(87,503), respectively. Exhibit B-9, Attachment, Revised Rates Model, Excel rows 451 and 455.

⁹⁰ Exhibit B-9, BCUC IR 18.1.

⁹¹ Exhibit B-9, BCUC IR 18.1.

⁹² Exhibit B-11, p. 1.

⁹³ Exhibit B-9, BCUC IR 18.1.

Positions of the Parties

The CEC states that it is satisfied with the updated tax calculations and associated rate impacts.⁹⁴

Panel Determination

In this section the Panel considers the issues with respect to CEMP including income tax expense in its revenue requirement. As CEMP itself notes, it is a limited partnership and does not pay income taxes. Any income it earns is taxed at the shareholder level. Moreover, CEMP forecasts that it will be in a tax loss position throughout the Test Period, which means that its shareholders will receive a tax loss from CEMP's operations. During IRs the Panel asked CEMP whether it is appropriate for it to recover income tax from ratepayers; however, CEMP did not address this question.

The Panel does not consider it appropriate for CEMP to account for an income tax provision as part of its revenue requirements, and therefore **we deny the recovery from ratepayers of income tax expenses of \$93,821, \$117,622 and \$125,831 in the forecast revenue requirements for 2024, 2025 and 2026, respectively. The Panel directs CEMP to remove income taxes from its revenue requirements for each year of the Test Period as part of the final compliance filing for this proceeding.** We have two reasons for this directive. First, given that CEMP is a limited partnership, we consider it inappropriate for a partnership to recover tax that it has not paid, and nor will it be required to pay. Second, we consider it inappropriate for CEMP to have any deemed tax provision, since it is in a net loss position for tax purposes and hence, its shareholders will receive a tax loss from its operations.

3.0 Process to Establish Permanent Rates

Several issues arose during the proceeding related to setting rates for the Test Period. The first issue related to the timing of when the rates would be made permanent. In the Application CEMP requested approval of rates on an interim basis because it intended to file an evidentiary update, the timing of which had yet to be determined, supporting a request for approval on a permanent basis once Phase 2 actual capital costs were known. By Order G-350-23 the Panel approved the rates set forth in Appendix B of the Application on an interim and refundable/recoverable basis and requested submissions from CEMP related to the evidentiary update and the timing of recording actual Phase 2 capital costs in rate base. In response, CEMP clarified that it is amenable to setting permanent rates based on forecast Phase 2 capital costs and adjusting the rate base to reflect actual Phase 2 capital costs at the beginning of the next test period.⁹⁵ Following this, the BCUC asked CEMP for confirmation that it does not intend to file an evidentiary update for permanent rates on the basis of actual Phase 2 costs. In response, CEMP stated that it "maintains its position and intends to submit an evidentiary update to accurately reflect the actual costs incurred upon the completion of Phase 2 by Q1 of 2025."⁹⁶

The second issue related to which interim rate should remain in place pending the outcome of the BCUC GCOC Stage 2 proceeding. Order G-236-23 for the BCUC GCOC Stage 1 proceeding included the following directive, which pertains to CEMP:

⁹⁴ CEC Final Argument, p. 16.

⁹⁵ Exhibit B-2, p. 1.

⁹⁶ Exhibit B-4, BCUC IR. 1.1.

Interim rates are established, effective January 1, 2024, on a refundable or recoverable basis, for all other utilities, except FBC, that currently use the Benchmark Utility to set their capital structure and equity return pending the BCUC's final decision on Stage 2 of the GCOC proceeding.

The rates set out in the Application⁹⁷ and approved on an interim basis by Order G-350-23 use the previously approved⁹⁸ return on equity of 9.5 percent and equity thickness of 42.5 percent. During the proceeding, CEMP filed what it described as a significant update to its rates model, noting that the changes are centred primarily on its cost of capital and forecasted O&M costs as submitted in its 2024 GCOC Stage 2 filing. As a result, CEMP updated the return on equity to 10.4 percent and equity thickness to 49 percent.⁹⁹

Considering the potential impact of the GCOC Stage 2 Decision, the Panel requested submissions¹⁰⁰ from parties on whether the interim rate approved by Order G-350-23, or the rate resulting from the directives and determinations in this decision, should remain interim pending the outcome of the GCOC Stage 2 proceeding. The Panel also requested submissions on the approach to recover from or refund to ratepayers the variance between interim and permanent rates.

CEMP submits that the Panel should direct the continuation of the interim rate approved by Order G-350-23 until the GCOC Stage 2 proceeding is complete, given the relatively small difference it anticipates between that rate and the interim rate resulting from the BCUC's final decision on this proceeding.¹⁰¹ CEMP proposes to file revised tariff pages to the BCUC within 30 days of the final decision on this proceeding or the GCOC Stage 2 proceeding, whichever is later.¹⁰² CEMP proposes to incorporate the impacts of the BCUC's decisions on both this proceeding and the GCOC Stage 2 proceeding into permanent rates simultaneously, on a net basis, with any difference refunded or recovered by CEMP through the application of a one-time rate adjustment to credit or charge each customer accordingly.¹⁰³

Positions of the Parties

The CEC submits that the BCUC should maintain the interim rate approved by Order G-350-23 until the GCOC Stage 2 proceeding is complete, at which point the rate can be adjusted and made permanent. It states this is preferable, to avoid having more updates than necessary. In addition, depending on the amount to be recovered or refunded, the CEC supports a one-time adjustment, as CEMP proposes, or using the RDDA to address variances between the interim and permanent rates.¹⁰⁴

Panel Determination

The Panel approves CEMP to maintain the 2024 Capacity Charge approved on an interim basis by Order G-350-23, pending the BCUC's decision on the GCOC Stage 2 proceeding. Charging this rate will retain the deemed capital structure and cost of equity as set out in the Application. We consider this to be more efficient than adjusting the rate to reflect a deemed capital structure and return on equity that are to be determined in the pending the GCOC Stage 2 Decision. **The Panel directs CEMP to establish a Revenue Variance Deferral Account**

⁹⁷ Exhibit B-1, Appendix B, p. 1.

⁹⁸ CEMP 2021-2023 RRA Decision, Directive 7.

⁹⁹ Exhibit B-7, p. 1.

¹⁰⁰ Order G-184-24, Appendix B.

¹⁰¹ Exhibit B-12, p. 3.

¹⁰² Exhibit B-12, p. 3.

¹⁰³ Exhibit B-12, pp. 3-4.

¹⁰⁴ Exhibit C1-5, p. 3.

to record the difference between revenue collected under the 2024 Capacity Charge approved on an interim basis by Order G-350-23 and the 2024 Capacity Charge resulting from the directives and determinations in this decision, with interest accruing at CEMP's WACC.

It is not necessary for CEMP to file tariff pages at this time because the permanent rate will not be determined until the GCOC Stage 2 proceeding is complete. However, to advance the review of any updates to the rates model and rates due to this decision, **the Panel directs CEMP to submit a compliance filing within 30 days of this decision, including an updated rates model with any applicable adjustments to its revenue requirements and rates to reflect the directives and determinations made throughout this decision, and excluding any updates to CEMP's deemed capital structure and return on equity that are subject to further direction from the BCUC in the GCOC Stage 2 Decision.** The Panel expects that the BCUC in the GCOC Stage 2 Decision will provide further direction regarding the implementation of affected utilities' cost of capital and how any differences between interim and permanent rates will be collected or refunded. To ensure that any variances between interim and permanent rates are addressed in a timely manner, **the Panel directs CEMP to file a proposal to address the refund or recovery of any amounts related to the variance between interim and permanent rates, including the disposition of the balance of the Revenue Variance Deferral Account, within 30 days of the GCOC Stage 2 Decision, or as otherwise directed by the BCUC in the GCOC Stage 2 Decision, once permanent rates are established.**

Finally, although CEMP indicates that it intends to submit an evidentiary update to reflect the actual costs incurred upon the completion of Phase 2 by Q1 of 2025, the Panel notes that an evidentiary update will not be possible because this proceeding is concluded once our decision is issued. CEMP can submit evidence of the actual costs of the completed Phase 2 in its next RRA.

4.0 Other Issues Arising

4.1 Direction on PCA Costs

The regulatory process included three rounds of IRs, two requests for submissions, and one request for supplemental information. There were several issues canvassed at each round of IRs, discussed below, and to streamline the review process, the BCUC limited the scope of the second and third round of IRs. As discussed in Section 1.2, CEMP's unexpected Evidentiary Update, filed as part of its responses to BCUC IR No. 2, is why this proceeding went to a third round of IRs.

By Order G-57-24, dated March 5, 2024, the BCUC established an amended regulatory timetable with a second round of BCUC and intervener IRs and final arguments. The scope of IR No. 2 was limited to the specific topics outlined below:

- Proposed Capacity Charge for the Test Period.
- Maintenance, water chemical, water treatment, and make-up water costs.
- Building M3 capital costs and related expenses.
- Building M4 depreciation costs.

By letter dated April 9, 2024, CEMP filed a request to the BCUC for an extension to the IR No. 2 response deadline from April 9, 2024 to April 12, 2024, given challenges allocating resources to update its rates model. CEMP clarified that it was not seeking any changes to the subsequent deadlines in the regulatory timetable established by Order G-57-24, including deadlines for final and reply arguments. By letter dated April 10, 2024, the BCUC granted an extension to the IR response deadline to April 12, 2024.

On April 12, 2024, CEMP filed its responses to the BCUC and intervener IR No. 2. As part of that filing, CEMP submitted an Evidentiary Update, which included a revised rates model with substantial changes compared to the rates model filed with the Application. The revised rates model includes changes in the following categories, among others:

- Deemed capital structure of debt and equity.
- Cost of equity and cost of debt for 2024 to 2026.
- General inflation rate for 2024 to 2026.
- Corporate overhead costs for 2024 to 2026.
- Tax provision for 2024 to 2026.
- Operations and Maintenance (O&M) costs for 2024 to 2026.
- Maintenance and insurance costs for 2024 to 2026.
- The useful economic life of the energy generation centre (111 E 5th).
- Depreciation for building M4.
- Stub periods were added at the end of project life for depreciation and subscribed capacity calculations.
- RDDA was set to zero in year of first asset retirement (no change), after which the rate calculation reverts to a cost-of-service model.

As a result of the above-mentioned updates to CEMP's rates model, CEMP amended the approvals sought in relation to the Capacity Charge and forecast RDDA additions for the Test Period.

By Order G-114-24 dated April 17, 2024, the BCUC adjourned the regulatory timetable established by Order G57-24 until further notice.

By Order G-129-24 dated May 10, 2024, the BCUC restarted the review of the Application with a new regulatory timetable. The Panel stated it was concerned with the inefficiencies in the regulatory process created by the filing of the Evidentiary Update at such a late stage of the proceeding. In its extension request dated April 9, 2024, CEMP was not transparent about the nature of its anticipated filing. It did not specify that the IR No. 2 responses would include substantial updates beyond both the scope limitations set by Order G-57-24 and responses to questions asked by BCUC and interveners. Further, CEMP did not request any changes to the remaining, imminent deadlines in the regulatory timetable for final and reply arguments. The Panel explained that, given the unexpected nature of the information contained in the Evidentiary Update and the proximity of the filing to the argument dates, the Panel had adjourned the timetable to allow time to review the information filed and consider the next steps in the regulatory process.

The Panel stated that CEMP had created significant inefficiencies by filing such significant updates to evidence after two rounds of IRs were already filed by the BCUC and interveners, since much of the time spent as part of the regulatory process up to that point had been based on data that was superseded by the Evidentiary Update.¹⁰⁵

For the above noted reasons, the Panel considered that further regulatory process including a third round of IRs was now required to allow parties sufficient opportunity for discovery of evidence and adequate time to prepare their written arguments. The scope of IR No. 3 was limited to the evidence in CEMP's responses to BCUC and intervener IR No. 2, including the Evidentiary Update, except for some topics that the Panel considered to be out of scope for IR No. 3.

On June 12, 2024, CEMP filed its responses to the BCUC and intervener IR No. 3. As part of that filing, CEMP included a third iteration of its rates model¹⁰⁶ and tariff pages, and amended - for the third time - the approvals sought in relation to the Capacity Charge and forecast RDDA additions for the Test Period, as follows:

Capacity Charge for the Test Period:

	Unit	2024	2025	2026
Original Application	\$/kW/year	347.54	354.49	361.58
	\$/kW/mo.	28.96	29.54	30.13
Evidentiary Update	\$/kW/year	367.08	374.78	382.28
	\$/kW/mo.	30.59	31.23	31.86
IR No. 3 Update	\$/kW/year	348.06	355.37	362.48
	\$/kW/mo.	29.01	29.61	30.21

Forecast RDDA Additions for the Test Period:

		2024	2025	2026
Annual Fixed Cost of Service (\$)	Original Application	1,074,592	1,098,378	1,088,570
	Evidentiary Update	1,229,864	1,382,667	1,410,369
	IR No. 3 Update	1,262,300	1,331,690	1,351,259
Forecast RDDA Additions (\$)	Original Application	92,792	96,942	67,104
	Evidentiary Update	339,092	323,899	330,427
	IR No. 3 Update	417,664	327,760	327,250

Due to the inefficiencies in the regulatory process discussed above, by Order G-129-24, the Panel requested submissions from parties on whether the shareholders of CEMP should bear a portion of any PCA costs awarded for this proceeding and, if so, the appropriate portion of PCA costs for the shareholders of CEMP to bear.

Positions of the Parties

The CEC submits that CEMP was not adequately prepared for this proceeding, as reflected in its Application and IR responses and that this has likely led to additional regulatory costs. It states that its additional costs regarding

¹⁰⁵ Order G-129-24, Order and Decision, p. 3.

¹⁰⁶ Exhibit B-9, Attachment, Revised Rates Model.

the regulatory process amount to 15 to 20 percent of what the CEC will file for in its application for a participant cost award.

The CEC observes that there is evidence that CEMP is taking on risks of the developer to the detriment of future end-user ratepayers. For example, the shareholder appears to have taken on the risk for chiller replacements, which have come from the acquisition process being managed in favour of the developer. The CEC considers that the BCUC could hold the shareholder responsible for inadequate management of the project and the regulatory process if it was to find this to be the case.¹⁰⁷

In reply, CEMP submits that the CEC has not demonstrated that CEMP handled this proceeding inadequately or how such mismanagement translates to an estimated additional 15 to 20 percent of the PCA costs in this proceeding. CEMP acknowledges its partial contribution to inefficiencies in this proceeding and goes on to suggest that the CEC should also review its approach. According to CEMP, the CEC asked over 100 questions across three rounds of IRs, 56 percent more than the BCUC, which CEMP believes was excessive and inefficient, leading to unnecessary costs to the ratepayers.¹⁰⁸

Panel Determination

The Panel distinguishes between the CEC's comments related to CEMP's management of the Mount Pleasant DCS project and those related to CEMP's management of the regulatory process. With respect to CEMP's management of the project, and specifically in relation to the chillers, this matter is addressed in Section 2.2 where the Panel concluded that it is satisfied with CEMP's approach to chiller replacements. The remaining Panel discussion in this section focuses on CEMP's management of the regulatory process.

The Panel finds that CEMP was not properly prepared for this proceeding. For example, after two rounds of IRs, CEMP filed an evidentiary update that included significant changes to more than ten categories in CEMP's rates model, which required detailed review and analysis from BCUC staff and the intervener. The BCUC adjourned the proceeding to consider the implications. A further example is that CEMP amended the approvals sought for the Capacity Charge and RDDA additions three times.

CEMP has caused delays and extra process, the consequences for which should not be imposed entirely on CEMP's ratepayers. We find that the shareholders should bear a portion of any PCA costs that are eventually awarded. The CEC estimates that CEMP's inadequate management of the regulatory process represents 15 to 20 percent of what it will apply for in its application for a participant cost award. CEMP disputes that estimate, although it does accept responsibility for having partially contributed to inefficiencies in the proceeding. The Panel is satisfied that CEMP's contribution to the inefficiency of the proceeding is not less than 15 percent of the CEC's costs. Therefore, **the Panel directs CEMP to record 85 percent of any costs awarded to the CEC for its participation in this proceeding for recovery from CEMP's ratepayers, with the remaining 15 percent being to the account of CEMP's shareholder.**

This is not the appropriate forum for CEMP's observations regarding the CEC's approach to the proceeding. If the CEC applies for a participant cost award, the BCUC Rules of Practice and Procedure related to PCA contemplate that CEMP will have the opportunity to provide submissions on the CEC's application.¹⁰⁹

¹⁰⁷ CEC Final Argument, p. 19.

¹⁰⁸ CEMP Reply Argument, p. 10.

¹⁰⁹ BCUC Rules of Practice and Procedure, attached to Order G-72-23, Rule 35.03.

DATED at the City of Vancouver, in the Province of British Columbia, this 21st day of October 2024.

Original signed by:

E. B. Lockhart
Commissioner

Creative Energy Mount Pleasant Limited Partnership
Rates for the Mount Pleasant District Cooling System

EXHIBIT LIST

Exhibit No.	Description
<i>COMMISSION DOCUMENTS</i>	
A-1	Letter dated November 16, 2023 – Appointing the Panel for the review of Creative Energy Rates for the Mount Pleasant District Cooling System
A-2	Letter dated December 14, 2023 – BCUC Order G-350-23 establishing a regulatory timetable with request for submissions
A-3	Letter dated January 12, 2024 – BCUC Order G-12-24 establishing a further regulatory timetable and public notice
A-4	Letter dated January 31, 2024– BCUC Information Request No. 1 to CEMP
A-5	Letter dated March 5, 2024 – BCUC Order G-57-24 amending the regulatory timetable
A-6	Letter dated March 20, 2024–BCUC Information Request No. 2 to CEMP
A-7	Letter dated April 10, 2024 – BCUC response to CEMP extension request
A-8	Letter dated April 17, 2024 – BCUC Order G-114-24 adjourning the regulatory timetable
A-9	Letter dated May 10, 2024 - BCUC Order G-129-24 establishing an amended regulatory timetable
A-10	Letter dated May 23, 2024 – BCUC Information Request No. 3 to CEMP
A-11	Letter dated June 19, 2024 – Request for Supplemental Information
A-12	Letter dated July 10, 2024 – BCUC Order G-184-24 amending the regulatory timetable and request-for-submissions

COMMISSION STAFF DOCUMENTS

A2-1	Letter dated January 31, 2024 – BCUC Staff submitting Creative Energy Mount Pleasant Limited Partnership Progress Report No. 5 Revision 1 dated October 17, 2023
------	--

APPLICANT DOCUMENTS

- B-1 **CREATIVE ENERGY MOUNT PLEASANT LIMITED PARTNERSHIP (CEMP)** - Application for Rates for the Mount Pleasant District Cooling System dated October 31, 2023
- B-2 Letter dated December 21, 2023 – CEMP submissions on Appendix B Items
- B-3 Letter dated January 22, 2024 – CEMP submitting confirmation of Public Notice requirements in compliance with Order G-12-24 Directive 2
- B-4 Letter dated February 26, 2024– CEMP submitting responses to BCUC Information Request No. 1
- B-5 Letter dated February 26, 2024– CEMP submitting responses to CEC Information Request No. 1
- B-6 Letter dated April 9, 2024– CEMP submitting extension request to file responses to Information Requests No. 2
- B-7 Letter dated April 12, 2024 – CEMP submitting responses to BCUC Information Request No. 2
- B-8 Letter dated April 12, 2024 – CEMP submitting responses to CEC Information Request No. 2
- B-9 Letter dated June 12, 2024 – CEMP submitting responses to BCUC Information Request No. 3
- B-10 Letter dated June 12, 2024 – CEMP submitting responses to CEC Information Request No. 3
- B-11 Letter dated June 24, 2024 – CEMP submitting Supplemental Information
- B-12 Letter dated July 17, 2024 – CEMP submission on items in compliance with Order G-184-24

INTERVENER DOCUMENTS

- C1-1 **COMMERCIAL ENERGY CONSUMERS ASSOCIATION OF BRITISH COLUMBIA (CEC)** – Letter dated January 30, 2024 request to Intervene by David Craig
- C1-2 Letter dated February 12, 2024 – CEC submitting Information Request No. 1 to CEMP
- C1-3 Letter dated March 26, 2024 – CEC submitting Information Request No. 2 to CEMP
- C1-4 Letter dated May 29, 2024 – CEC submitting Information Request No. 3 to CEMP
- C1-5 Letter dated July 22, 2024 – CEC submission on items in compliance with Order G-184-24

Creative Energy Mount Pleasant Limited Partnership
Rates for the Mount Pleasant District Cooling System

SUMMARY OF DIRECTIVES

This summary is provided for the convenience of readers. In the event of any difference between the directives in this summary and those in the final order and body of the decision, the wording in the final order and decision shall prevail.

Reference	Directive
Directive 1 of Order	The Capacity Charge and additions to the Revenue Deficiency Deferral Account over the Test Period are approved, as set out in the revised rates model included in CEMP's responses to BCUC IR No. 3, subject to the directives and determinations made throughout this decision and subject to the BCUC determinations in the Generic Cost of Capital (GCOC) Stage 2 Decision that impact CEMP's deemed capital structure and return on equity.
Directive 2 of Order	Notwithstanding Directive 1 of this order, CEMP is directed to maintain the 2024 Capacity Charge approved on an interim basis by Order G-350-23, pending the BCUC's decision on the GCOC Stage 2 proceeding.
Directive 3 of Order	CEMP is directed to establish a Revenue Variance Deferral Account to record the difference between revenue collected under the 2024 Capacity Charge approved on an interim basis by Order G-350-23 and the 2024 Capacity Charge resulting from Directive 1 of this order, with interest accruing at CEMP's weighted average cost of capital.
Directive 4 of Order	The Variable Charge is approved on a permanent basis effective January 1, 2024 through December 31, 2026.
Directive 5 of Order	CEMP is directed to file a proposal to address the refund or recovery of any amounts related to the variance between interim and permanent rates, including the disposition of the balance of the Revenue Variance Deferral Account, within 30 days of the GCOC Stage 2 Decision, or as otherwise directed by the BCUC in the GCOC Stage 2 Decision, once permanent rates are established.
Directive 6 of Order	CEMP is directed to recover water chemical costs through the Capacity Charge, effective January 1, 2024.
Directive 7 of Order	CEMP is directed to record 85 percent of any costs awarded to the CEC for its participation in this proceeding for recovery from CEMP's ratepayers, with the remaining 15 percent being to the account of CEMP's shareholder.
Directive 8 of Order	CEMP is directed to file a compliance filing within 30 days of this order, including a revised rates model with any applicable adjustments to its revenue requirements and rates to reflect the directives and determinations made throughout this decision, and excluding any updates to CEMP's deemed capital structure and return on equity that are subject to further direction from the BCUC in the GCOC Stage 2 Decision.

Directive 9 of Order	CEMP is directed to comply with all other directives and determinations outlined in the decision issued concurrently with this order.
Page 6 of Decision	CEMP is directed to provide an update on the options for installing energy meters at buildings M1 and M3 in its next RRA.
Page 10 of Decision	CEMP is directed to provide submissions in its next RRA on whether Directive 1(a) of Order C-5-20 should be varied or rescinded and if not, why not.
Page 11 of Decision	CEMP is denied the recovery of the 2024 depreciation for building M4 of \$124,453 and directed to adjust its rates model and revenue requirements for 2024 to remove the depreciation associated with building M4 as part of the final compliance filing for this proceeding.
Page 12 of Decision	CEMP is directed to ensure that the Variable Charge records only electricity and make-up water costs, as billed by the City of Vancouver or the developer, and not water chemical or water treatment costs.
Pages 12–13 of Decision	CEMP is directed to report its actual water chemical costs and provide an analysis explaining any variance(s) between forecast and actual water chemical costs for each year of the Test Period in its next RRA.
Page 13 of Decision	Effective January 1, 2024 CEMP is approved to continue use of the RDDA, over a 25-year levelization period beginning February 1, 2021 and attracting interest at CEMP's weighted average cost of capital, to record the difference between the annual revenue at the approved Capacity Charge and the approved annual forecast cost of service, excluding make-up water and electricity costs.
Page 14 of Decision	CEMP is denied the recovery from ratepayers of income tax expenses of \$93,821, \$117,622 and \$125,831 in the forecast revenue requirements for 2024, 2025 and 2026, respectively. CEMP is directed to remove income taxes from its revenue requirements for each year of the Test Period as part of the final compliance filing for this proceeding.