Creative Energy Vancouver Platforms Inc.

Application for Rates
for the Core Steam and Northeast False Creek Systems

Decision
and Order G-345-22A

November 29, 2022

Before:
T. A. Loski, Panel Chair
A. C. Dennier, Commissioner
A. Pape-Salmon, Commissioner

TABLE OF CONTENTS

Page no.

Executive Summary

On November 1, 2021, Creative Energy Vancouver Platforms Inc. (Creative Energy) filed its application with the British Columbia Utilities Commission (BCUC) for approval to consolidate the revenue requirements and unify the rate base and rates for its Northeast False Creek (NEFC) thermal energy system with its core steam (Core Steam) thermal energy system (Proposed Rate Design) (Application Part One). The Proposed Rate Design was put forward to address: (i) the updated load forecast for the NEFC service area; (ii) the recovery mechanism for the NEFC's revenue deferral deficiency account (RDDA); and (iii) an imbalance in the allocation of costs between the Core Steam and NEFC systems. Specifically, under the Proposed Rate Design, the consolidated revenue requirements of the Core Steam and NEFC systems are recovered under unified rates common to both energy systems, and a system contribution charge (NEFC System Contribution Charge) is recovered separately and only from customers connected to the NEFC system.

On December 1, 2021, Creative Energy filed its 2022 revenue requirements and request for approval of interim and permanent rates, effective January 1, 2022, for the Core Steam and NEFC systems, based on the Proposed Rate Design (Application Part Two). As part of the 2022 revenue requirements for the Core Steam and NEFC systems, Creative Energy seeks BCUC approval related to several new and existing deferral accounts. Applications Part One and Part Two are collectively referred to as the Application. The Panel established a regulatory process for review of the Application, including a written hearing process with registration of intervenors, interrogatories and final arguments.

The Core Steam system includes a centralized natural gas boiler plant (Core Steam Plant) and a network of underground steam distribution piping which supplies thermal energy to more than 215 buildings in Vancouver's downtown, including the NEFC system to produce hot water for four buildings in the NEFC neighbourhood. However, Creative Energy currently treats steam customers and hot water customers as two separate classes of service (steam service and hot water service). The NEFC system is thus both a customer of the Core Steam system and a separate Creative Energy service area with its own revenue requirements, rate base and rates for hot water service.

The NEFC system was granted a Certificate of Public Convenience and Necessity (CPCN) in 2015 for Creative Energy's application for a CPCN for a Low Carbon Neighbourhood Energy System for NEFC and Chinatown Neighbourhoods of Vancouver (2015 NEFC CPCN) based on a view that the system would temporarily be a customer of the Core Steam system, with the expectation that the NEFC service area would build out and the forecast load would grow over time such that the NEFC building customers would ultimately become customers of a new functionally separate, low-carbon utility. However, the forecast load did not materialize as expected, resulting in the NEFC RDDA becoming larger than forecast at the time of the 2015 NEFC CPCN proceeding. This indicated that current hot water rates for the NEFC building customers may not be sufficient to recover the capital costs incurred to build the NEFC system. Accordingly, in the decision on Creative Energy's 2019–2020 Revenue Requirements Application for the Core Steam system and NEFC Service Areas, the BCUC directed Creative Energy to file a comprehensive proposal for an NEFC rate design and for setting 2022 rates.

The Panel approved interim rates, effective January 1, 2022, for each the Core Steam and NEFC systems based on the respective existing rate designs (Existing Rate Design) on a refundable/recoverable basis. Given the potential complexity of the changes, implications for customers of both the Core Steam and NEFC systems, and alternatives that may be explored as part of the Application review, the Panel did not consider it appropriate to set interim rates based on the Proposed Rate Design.

On April 21, 2022, Creative Energy filed an evidentiary update and errata to the Application and, among other things, revised the steam load forecast to remove the impact of the COVID-19 pandemic, which as a result, amended the indicative rates, effective January 1, 2022, for the Core Steam system under the Existing Rate Design, and the Core Steam and NEFC systems under the Proposed Rate Design (Evidentiary Update).

The indicative rates as amended by the Evidentiary Update under the Proposed Rate Design, and inclusive of fuel charges, will result in: (i) lower rates for the NEFC building customers as compared to the Existing Rate Design ($90.83 per megawatt hours (MWh) as compared to $105.52 per MWh); and (ii) higher rates for the Core Steam customers as compared to the Existing Rate Design ($81.33 per MWh as compared to $79.48 per MWh).

The Panel reviewed the evidence with respect to the 2022 forecast revenue requirements for each the Core Steam and NEFC systems, including the reasons provided for the changes in costs as compared to the BCUC-approved 2021 amounts. The Panel finds the 2022 forecast revenue requirements for each the Core Steam and NEFC systems to be reasonable for the purposes of setting rates in the Fiscal 2022 test year, subject to the directives and determinations in this decision. In addition, the Panel establishes various deferral accounts and makes several directives and approvals on specific revenue requirement issues which are set out in this decision.

The Proposed Rate Design addresses the issues with respect to NEFC's levelized rates, including the recovery of the NEFC RDDA and the net incremental costs of the Core Steam system to serve customers connected to the NEFC system through the NEFC System Contribution Charge. The Panel approves Creative Energy's proposal to consolidate the cost of service and unify the rate base and rates for the NEFC system with the Core Steam system, effective January 1, 2022, subject to the directives and determinations in this decision. The approval is based on several reasons including:

- Creative Energy's Proposed Rate Design, including the system extension analysis and resulting NEFC System Contribution Charge, reasonably allocates the costs between the Core Steam and NEFC systems.
- Its rates are simple and readily understood.
- It follows cost causation principles and promotes predictable and stable recovery of the cost to serve the Core Steam and NEFC customers.
- Regulatory and administrative efficiencies are expected under the Proposed Rate Design.
- The Proposed Rate Design will offer a consistent basis for customers across the unified rate base to evaluate competitive alternatives for thermal energy service.
- It will form a reasonable and appropriate starting point for a new rate design to support low-carbon energy service for all customers served by the Core Steam Plant.

The Panel considers that an effective date of January 1, 2022 appears to reduce rate volatility attributable to rate design and provides some rate stability for customers. The Panel considers reduced volatility of rates to be consistent with rate deign principles and serves the public interest.

1.0 Introduction

This decision addresses Creative Energy Vancouver Platforms Inc.'s (Creative Energy) application to the British Columbia Utilities Commission (BCUC) for approval to consolidate the revenue requirements of the core steam (Core Steam) and Northeast False Creek (NEFC) thermal energy systems (TES), and charge customers connected to the NEFC system the same rates as customers connected to the Core Steam system, plus a system contribution charge. This decision also addresses the rates, effective January 1, 2022, for customers connected to both the Core Steam and NEFC systems.

1.1 Background and Application

Background

Creative Energy is a wholly owned subsidiary of Creative Energy Developments Ltd. (CEDLP), a partnership of Creative Energy Canada Platforms Corps. and Emanate Energy Solutions Inc., which are subsidiaries of Westbank Holdings (Westbank) and InstarAGF Essential Infrastructure Fund (InstarAGF), respectively. Creative Energy owns and operates several TES, which include the Core Steam and NEFC systems, with the Core Steam system being the largest.

The Core Steam system includes a centralized natural gas boiler plant located at 720 Beatty Street (Core Steam Plant) and a network of underground steam distribution piping which supplies thermal energy to more than 215 buildings in Vancouver's downtown.[1] The Core Steam system also supplies steam to the NEFC system to produce hot water for four buildings in the NEFC neighbourhood of Vancouver.[2] However, Creative Energy currently treats steam customers and hot water customers as two separate classes of service (steam service and hot water service). The NEFC system is thus both a customer of the Core Steam system and a separate Creative Energy service area with its own revenue requirements, rate base and rates for hot water service.[3]

Rates for the Core Steam system have historically been set using a traditional cost-of-service approach.[4] In contrast, since its inception in 2016, rates for the NEFC system have been set using a levelized approach, with the NEFC Revenue Deficiency Deferral Account (RDDA) in place to record the impact of timing differences between the costs incurred to install the required infrastructure to serve hot water load, and the revenues from the buildout of customer load over time.[5]

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[1] Creative Energy's 2021 Long Term Resource Plan (2021 LTRP) proceeding, decision accompanying BCUC Order G-283-21, Section 1, p. 1; Creative Energy's Application for a CPCN for the Core Steam System Decarbonization Project (Decarbonization Project) proceeding, decision accompanying BCUC Order C-5-22, Section 1.1, p. 1; Customer figures retrieved from: http://creative.energy/about

[2] Exhibit B-11, BCUC IR 12.1.

[3] 2019–2020 Core and NEFC RRA Decision; Section 1.1, p. 1.

[4] Creative Energy's 2019–2020 RRA for the Core Steam System and NEFC Service Areas Decision accompanying BCUC Order G-227-20 (2019–2020 Core and NEFC RRA Decision), p. (i).

[5] 2019–2020 Core and NEFC RRA Decision, p. (i); Creative Energy Application for a Certificate of Public Convenience and Necessity (CPCN) for a Low Carbon Neighbourhood Energy System (NES) for NEFC and Chinatown Neighbourhoods of Vancouver (2015 NEFC CPCN) Decision accompanying BCUC Order C-12-15, Section 4.5.1, p. 61.

Application

Creative Energy filed the application that is addressed by this decision in two parts. Part one was filed on November 1, 2021 and addresses Creative Energy's proposal to consolidate the cost of service and unify the rate base and rates for the NEFC system with the Core Steam system (Proposed Rate Design), effective January 1, 2022 (Application Part One). Specifically, under the Proposed Rate Design, the consolidated revenue requirements of the Core Steam and NEFC systems are recovered under unified rates common to both energy systems (Unified Rates), and a system contribution charge (System Contribution Charge) is recovered separately and only from customers connected to the NEFC system. Part two of the application was filed on December 1, 2021, and includes, among other things, Creative Energy's 2022 revenue requirements and request for approval of interim and permanent rates, effective January 1, 2022, for the Core Steam and NEFC systems, based on the Proposed Rate Design (Application Part Two). Applications Part One and Part Two are collectively referred to as the Application.

The Application is filed, in part, in response to a direction in the BCUC decision regarding the proceeding for Creative Energy's 2019–2020 Revenue Requirements Application (RRA) for the Core Steam system and NEFC Service Areas (2019–2020 Core and NEFC RRA). In that proceeding, evidence was presented that showed the actual NEFC hot water demand was significantly less than the forecast demand that formed the basis for the levelized rate design, indicating that the current rates may not be sufficient to recover the capital costs incurred to build and install the NEFC system.[6] As a result, the BCUC directed Creative Energy to file a comprehensive proposal for an NEFC rate design and for setting 2022 rates by June 30, 2021. The rate design was to address adjustments to the levelized rate based on an updated load forecast, as well as the recovery mechanism for the NEFC RDDA.[7]

1.2 Approvals Sought

Creative Energy provides in Application Part One and summarizes in its Final Argument the approvals sought for its Proposed Rate Design applicable to customers of the Core Steam NEFC systems as follows:[8]

1. Approval of a single rate schedule for the Core Steam and NEFC systems, effective January 1, 2022, to include the following thermal energy rates based on the Core Steam system's existing declining block rate structure:
    - For customers connected to the steam distribution network (Core Steam system), rates based on dollars per thousand pounds of steam ($/M#);
    - For customers connected to the hot water distribution network (NEFC system), rates based on dollars per megawatt hours of thermal energy ($/MWh) after applying a 0.347 MWh/M# steam to hot water conversion factor;
2. Approval to establish thermal energy rates on the basis of the consolidated cost to serve the NEFC service area with the cost to serve the Core Steam system service area, effective January 1, 2022, less (i) the NEFC Variance Deferral Account and NEFC RDDA balance as at December 31, 2021; and (ii) a system contribution (System Contribution) as described in point 3 below;

[6] 2019-2020 Core and NEFC RRA proceeding, Exhibit B-1, p. 9.
[7] BCUC Order G-227-20 dated September 2, 2020 and the accompanying decision, p. 50.
[8] Creative Energy Final Argument, Section 1.3.1, pp. 4–5.

3. Approval of a System Contribution calculated as part of the system extension test and reflecting the net present value of the incremental forecast cost to serve the NEFC building customers over the period 2022 to 2043 less the net present value of the incremental benefit to the Core Steam system of the extension to serve NEFC buildings over the same period;

4. Approval to consolidate the NEFC Variance Deferral Account and NEFC RDDA balance as at December 31, 2021 and establish a net NEFC RDDA balance;

5. Approval to recover from customers connected to the NEFC system the net NEFC RDDA balance as at December 31, 2021, plus the System Contribution, amortized over the remaining useful life of the NEFC assets through an NEFC System Contribution Charge. This charge would only apply to NEFC customers, both current and future, and would be recovered on a $/MWh basis; and

6. Approval to cancel the current NEFC tariff and the NEFC Variance Deferral Account.

Creative Energy provides in Application Part Two and summarizes in its Final Argument the approvals sought for the 2022 revenue requirements and rates for the Core Steam system and NEFC service areas in 2022 as follows:[9]

1. Permanent approval of the thermal energy rates and NEFC System Contribution Charge under the Proposed Rate Design, effective January 1, 2022;

2. Approval of a 2022 load forecast of 1,144,000 thousand pounds of steam (M#)[10] for the purpose of determining the average rate increase in the Fiscal 2022 test year (2022 Test Year), and an increase in the related water and electricity costs; [11]

3. Approval to increase the forecast debt interest rate for the 2022 rate-setting period from 4 percent to 4.5 percent;[12] and

4. Approval of the following non-rate base deferral accounts:

   - A Water Cost Deferral Account (WCDA) on an ongoing basis to record variances between actual versus forecast water costs for the 2022 Test Year, attracting interest at Creative Energy's short-term cost of debt.[13]
   - A Refinancing Cost Deferral Account (RCDA) on an ongoing basis to record the cost to refinance Creative Energy Vancouver's debt facilities in 2021 and in future years, as applicable, attracting interest at Creative Energy's weighted average cost of debt.[14]

In addition to the above-noted approvals sought, Creative Energy proposes the following with respect to the COVID-19 Deferral Account for the Core Steam system (COVID-19 Deferral Account) in its Final Argument:[15]

- Maintain the Core Steam system's COVID-19 Deferral Account in 2022 and continue to report the balance of the account to the BCUC on a quarterly basis. Coincident with each quarterly review, Creative

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[9] Creative Energy Final Argument, Section 1.3.1, pp. 5–6.

[10] Exhibit B-12, Table 5, p. 4.

[11] Creative Energy Final Argument, Section 1.3.1, p. 6.

[12] Creative Energy Final Argument, Section 1.3.1, p. 6; Please refer to the response to BCUC IR 40.2 and to Exhibit B-12. There was limited inquiry or evident concern into the debt interest rate for rate-setting purposes during the proceeding; recent analysis indicates that a forecast cost of debt for Creative Energy is closer to 4.5 percent and reasonably determined in line with external interest rate markers such as the Bank of Canada prime rate and Bankers' Acceptances.

[13] Exhibit B-11, BCUC IR 50.11.

[14] Exhibit B-11, BCUC IR 51.12.

[15] Creative Energy Final Argument, Section 1.3.1, pp. 7–8.

Energy proposes that if the Core Steam system's COVID-19 Deferral Account balance exceeds plus or minus $500,000, Creative Energy will apply for approval of a separate rate rider to recover the balance.

- Include as part of its next RRA, a proposal to close the deferral account, effective January 1, 2023, and to amortize any remaining balance at that time.

1.3 Legislative Authority and Regulatory Framework

Creative Energy filed the Application pursuant to Sections 58 to 61 of the *Utilities Commission Act* (UCA), which provide the BCUC with its rate-setting jurisdiction over public utilities and set out the framework for approval of rates. The Panel conducted its review of the Application based on this legislative authority.

The BCUC also has Thermal Energy Systems Regulatory Framework Guidelines (TES Guidelines) that describe the regulatory framework for TES in British Columbia and provide a scaled approach to the regulation of TES, where the regulatory oversight increases as the size and scope of the TES increase.[16]

1.4 Regulatory Process

Creative Energy filed Application Part One on November 1, 2021, and at the time of filing stated that it would file Application Part Two in mid-December 2021 and that interim rates for customers connected to both the Core Steam and NEFC systems would be requested on the basis of its Proposed Rate Design.[17] Subsequently, the Panel directed Creative Energy to file by December 1, 2021, Application Part Two and a separate filing with the 2022 revenue requirements and resulting rates, effective January 1, 2022, for each of the Core Steam and NEFC systems under the respective existing rate designs (Existing Rate Designs), as opposed to the Proposed Rate Design. The same order established a regulatory timetable which included: Notice of Application Parts One and Two, intervener registration, and written submissions from Creative Energy and interveners on the (i) proposed interim rates; (ii) the appropriate effective date for any rate design changes; and (iii) the approach to the review of the application and proposals for the regulatory process.[18]

Two interveners, the Commercial Energy Consumers Association of British Columbia (the CEC) and the Residential Consumer Intervenor Association (RCIA), registered and actively participated in the proceeding. The BCUC did not receive any letters of comment.

The Panel approved interim rates, effective January 1, 2022, for the Core Steam and NEFC systems based on the Existing Rate Designs on a refundable/recoverable basis and established a regulatory timetable to include two rounds of BCUC and intervener information requests (IRs). The Panel subsequently amended the regulatory timetable to include engagement and consultation activities.[19]

During the proceeding, Creative Energy filed an evidentiary update and errata to the Application and, among other things, revised the steam load forecast (Amended Load Forecast), which as a result, amended the indicative rates, effective January 1, 2022, for the Core Steam system under the Existing Rate Design, and the

[16] BCUC Order G27-15, Appendix A, Thermal Energy Systems Regulatory Framework Guidelines (TES Guidelines).
[17] Exhibit B-1, Application, Section 1.3, p. 4.
[18] BCUC Order G-339-21.
[19] BCUC Order G-11-22.

Core Steam and NEFC systems under the Proposed Rate Design. As part of the filing, Creative Energy included two corrections to its responses to BCUC IR No. 1 (Evidentiary Update).[20] The Panel reviewed the Evidentiary Update and the BCUC and Intervener IR No. 2 deadline, and adjourned the regulatory timetable until further notice to consider whether an amended IR deadline was warranted.[21] The Panel later established a regulatory timetable to restart the review of the Application, which included amended dates for the second round of BCUC and intervener IRs and varied the direction regarding the engagement and consultation activities.[22] On July 27, 2022, the Panel established the remainder of the regulatory timetable, which included written final and reply arguments.[23]

1.5 Decision Framework

In this decision, the Panel specifically addresses the following:

1. Section 2.0 provides the relevant historical context raised during the proceeding in relation to Creative Energy's Proposed Rate Design.

2. Section 3.0 addresses the Proposed Rate Design, including the NEFC System Contribution Charge, specific issues with respect to classes of service, alternatives considered, and the consultation activities on the Proposed Rate Design.

3. Sections 4.0 and 5.0 examine the 2022 load forecast and revenue requirements for the Core Steam system and the NEFC system, respectively.

4. Section 6.0 considers the effective date for Creative Energy's proposal to consolidate the revenue requirements of the Core Steam and NEFC system and to unify rates.

5. Section 7.0 addresses other key issues that arose during the proceeding and matters for compliance.

6. Section 8.0 provides a summary of the Panel's directive arising from this decision.

2.0 Historical Context for NEFC System

In 2011, the City of Vancouver adopted the Greenest City 2020 Action Plan, which included establishing low-carbon neighbourhood energy systems (NES).[24] The City of Vancouver confirmed the viability of a low-carbon NES in the NEFC and Chinatown area and identified Creative Energy's predecessor as a key partner given its close proximity to the neighbourhood.[25] In 2014, Creative Energy entered into negotiations with the City of

[20] Exhibit B-12, pp. 1–11.
[21] BCUC Order G-107-22.
[22] BCUC Order G-115-22.
[23] BCUC Order G-211-22.
[24] Greenest City 2020 Action Plan p. 18, retrieved from: https://vancouver.ca/files/cov/greenest-city-action-plan.pdf; 2015 NEFC CPCN proceeding, Exhibit B-1, p. 21; Section 2.2, p. 25.
[25] Exhibit B-1, Appendix A, p. 1.

Vancouver for a Neighbourhood Energy Agreement (NEA) that would govern the NES in NEFC and Chinatown.[26] In exchange for commitments to construct a new hot water distribution network and to pursue long-term carbon reductions for the neighbourhood, the City of Vancouver established mandatory connection requirements as part of the NEA to provide security of loads and economies of scale.[27]

Creative Energy filed a Certificate of Public Convenience and Necessity (CPCN) application in 2015 for the first phase of a low-carbon NES for NEFC and Chinatown Neighbourhoods of Vancouver (2015 NEFC CPCN), as the proposed NES was originally planned to proceed in two phases. Phase one consisted of a hot water piping network in NEFC and Chinatown, connected to Creative Energy's existing Core Steam system, through steam to hot water conversion stations.[28] The second phase included a transition to a functionally separate low-carbon energy source to meet the requirements of the NEA, and was anticipated to be in service in 2020.[29] Within the framework and two-phase development plan, the costs of the system and the rate design were based on a view that the NEFC system would temporarily be a customer of the Core Steam system in phase one, with the expectation that the NEFC building customers would ultimately become customers of a new functionally separate low-carbon utility in phase two.[30]

In 2015, the BCUC granted Creative Energy a CPCN for the first phase of the NEFC system. As part of the same decision, the BCUC denied approval of the NEA noting that the agreement suggested that the BCUC was approving a mandatory connection bylaw, which is outside the BCUC's jurisdiction.[31] Subsequently, Creative Energy resubmitted the NEA, in which it was restated, amended, and renamed, the NEFC NES Franchise Agreement. The NEFC NES Franchise Agreement included amendments to address certain BCUC directives in the 2015 NEFC CPCN Decision.[32] The BCUC determined that although the amendments included in the NEFC NES Franchise Agreement addressed some of its concerns raised on the NEA filed as part of the 2015 NEFC CPCN application, the mandatory connection bylaw continued to be in the scope of the NEFC NES Franchise Agreement. Accordingly, the BCUC did not approve the NEFC NES Franchise Agreement.[33]

In 2016, as part of Creative Energy's 2016–2017 RRA and Rate Design for NEFC Hot Water Service (2016–2017 NEFC RRA RDA) proceeding, the BCUC approved the rate design and rates for the NEFC system. The initial rate design for the NEFC system was established as though the NEFC system is functionally separate from the Core Steam system (that is, on a standalone basis) and treated as a customer of the Core Steam system.[34] The rates were based on the forecast NEFC load and buildout that was accepted by the BCUC in the 2015 NEFC CPCN proceeding, and as presented in the following table:[35]

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[26] Exhibit B-1, Appendix A, p. 1; 2015 NEFC CPCN proceeding, Exhibit B-1, Executive Summary, p. 2; Section 2.1, p. 22.
[27] 2015 NEFC CPCN proceeding, Exhibit B-1, Cover Letter, p. 1; Executive Summary, p. 2.
[28] 2015 NEFC CPCN decision, Executive Summary, p. 1; Exhibit B-1, Appendix A, p. 2.
[29] Exhibit B-1, Section 1.1, p. 1; Appendix A, p. 2.
[30] Exhibit B-1, Appendix A, p. 4; Exhibit B-11, BCUC IR 11.2 and 14.2.
[31] 2015 NEFC CPCN decision, p. 40.
[32] Creative Energy Application for a NEFC NES Franchise Agreement proceeding, Exhibit B-1, p. 1.
[33] Creative Energy Application for Approval of the Restated and Amended NEFC and Chinatown NEA, decision accompanying BCUC Order G-88-16, Section 6.3, p. 11.
[34] Exhibit B-1, Section 1.1, pp. 1–2.
[35] Exhibit B-1, Section 2.2.2, p. 7.

Table 1: Initial NEFC System Load Forecast and Buildout – CPCN Application[36]

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Heat Demand – MWh	1,715	9,450	21,295	27,600	31,555	38,900	40,650	43,900	45,370	48,100	48,100	48,100
Floor Area	18,130	99,680	224,335	290,700	332,280	409,500	427,980	46,2300	477,700	506,300	506,300	506,300
Percent of Buildout	4%	20%	44%	57%	66%	81%	85%	91%	94%	100%	100%	100%

The load forecast assumed full buildout of the NEFC service area by 2025, with a total connected floor area of 506,300 square metres and a total hot water demand of 48,100 MWh.[37] The NEFC rates and revenues for 2017 and 2018 were maintained on the basis of the initial load forecast and buildout of the NEFC system. However, the forecast load did not materialize over time as expected.[38]

During the BCUC proceeding to review the 2019–2020 Core and NEFC RRA, Creative Energy explained that in 2020, the NEFC system was expected to service a total connected floor area of 162,481 square metres (m2) and the forecast hot water demand was 19,162 MWh. This was approximately 40 percent less than the demand that was forecast in the 2015 NEFC CPCN Decision, which assumed a total connected floor area of 506,300 m2 and total hot water demand of 48,100 MWh at full buildout in 2025. This indicated that the current hot water rates may not be sufficient to recover the capital costs incurred to build the NEFC system and resulted in an NEFC RDDA balance in excess of $1.4 million in 2020.[39]

In response to the lower-than-expected load growth, as part of the 2019–2020 Core and NEFC RRA Decision, the BCUC directed Creative Energy to file a comprehensive proposal for an NEFC rate design and for setting 2022 rates and approved a 10 percent rate increase for NEFC hot water service in 2020. The BCUC considered that the 10 percent rate increase was a reasonable and appropriate approach to reducing additions to the NEFC RDDA while keeping the rate increase below the level typically associated with rate shock.[40] In the 2021 NEFC RRA Decision, the BCUC approved a 10 percent increase for NEFC hot water service for similar reasons, and acknowledged that the rate increase served effectively as a “bridge” until the filing of the comprehensive proposal for an NEFC rate design for setting 2022 rates.[41]

Further contributing to the uncertainty around future load growth for the NEFC service area, Creative Energy acknowledged that the City of Vancouver had extended its connection bylaw so that going forward, the City of Vancouver, rather than Creative Energy, would provide distribution services to future developments in the NEFC neighbourhood as a municipal utility. While Creative Energy still expects to supply the energy to the City of Vancouver using the installed capacity and capital expansions that Creative Energy had envisioned when the current rate design for NEFC was approved by the BCUC in 2016, there is currently no formal agreement in place for the provision of this service.[42] On June 1, 2022, the City of Vancouver concluded its evaluation of energy services in the NEFC service area and identified Creative Energy as the lead proponent.[43]

[36] Exhibit B-1, Section 2.2.2, Table 1, p. 8.
[37] Exhibit B-1, Section 2.2.2, p. 7; 2015 NEFC CPCN decision, Section 2.3, p. 10.
[38] Exhibit B-1, Section 2.2.2, p. 8.
[39] 2019–2020 Core and NEFC RRA decision accompanying BCUC Order G-227-20, Section 5.1, pp. 47, 50.
[40] 2019–2020 Core and NEFC RRA decision accompanying BCUC Order G-227-20, Section 5.1, pp. 47, 50, 51.
[41] 2021 NEFC Decision, Section 2.1, p. 5.
[42] BCUC Decision and BCUC Order G-227-20, p. 47.
[43] Exhibit B-1, Appendix A, p. 6.

Creative Energy currently has a total of four buildings connected to the NEFC system, with a total connected floor area of 162,481 m2 and a forecast demand of 19,566 MWh forecast in 2022. This is presented in the following table:[44]

Table 2: NEFC System and Customer Characteristics[45]

Steam to Hot Water Station		Building Customers					
Station	Capacity	Name	Type	Service start	Floor area m2	Peak Heat Demand kW	Energy MWh
PARQ	8,800 kW installed Space for 17,600 kW	PARQ	Commercial	2017	71,926	5,976	9,773
		One Pacific	Residential	2017	36,400	2,450	4,417
		ARC	Residential	2019	40,333	2,250	3,854
Aquilini	8,800 kW installed Space for 17,600 kW	ACS	Residential	2017	13,822	910	1,522
Total	17,600 kW installed Space for 35,200 kW				162,481	11,586	19,566

3.0 Proposed Rate Design

Creative Energy requests approval of the Proposed Rate Design in response to the 2019–2020 Core and NEFC RRA Decision, in which Creative Energy was directed to file a comprehensive proposal for an NEFC rate design and for setting 2022 rates. Creative Energy states that the Proposed Rate Design addresses the following items:[46]

- The updated load forecast for the NEFC service area. Specifically, the forecast load has not materialized as expected at the time the 2015 NEFC CPCN was granted.[47] The table below presents the NEFC forecast and actual heat demand from 2016 to 2021:

Table 3: NEFC System Load Forecast Compared to Actual (2016–2021)[48]

	2016	2017	2018	2019	2020	2021
Forecast Load – MWh [2015 NEFC CPCN]	1,715	9,450	21,295	27,600	31,555	38,900
Actual Load – MWh	n/a	7,919	14,348	17,984	17,982	19,692

- The recovery mechanism for the NEFC RDDA. Specifically, given that the load forecast did not materialize as expected, the NEFC RDDA balance has continued to increase and is $2.57 million as at December 31, 2021.[49]
- The unfair allocation of costs between the Core Steam and NEFC system. Under the Existing Rate Design, the NEFC system is treated as a customer of the Core Steam system and NEFC's load is included in the

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[44] Exhibit B-1, Section 3.1, p. 129.
[45] Exhibit B-1, Section 3.1, Table 5, p. 12.
[46] Exhibit B-1, Section 2.2, p. 7-8; Section 3.1, pp. 12–13; Section 4.1.2, p. 21.
[47] Exhibit B-1, Section 2.2.2, p. 8.
[48] Exhibit B-11, BCUC IR 19.1 (Note: Table uses "Heat Demand" rather than "Load"; for consistency with the accompanying text the table wording was updated to "Load").
[49] Exhibit B-11, BCUC IR 18.1.

total steam service load forecast, without consideration of the costs to serve the NEFC extension. As the planned transition of the NEFC system into a separate low carbon system did not occur, Creative Energy proposes to prospectively apply the BCUC's Utility System Extension Test Guidelines[50] (SET Guidelines) to reflect the Core Steam System's obligation to service the NEFC system customers.[51]

For context, the Core Steam system's existing rate design consists of steam rates and a Fuel Cost Adjustment Charge (FCAC) and FCAC Rate Rider. Steam rates are tiered, and customers are charged based on the volume of steam consumed per month. There are four tiers of steam rates priced per thousand pounds of steam on a declining block rate structure (i.e. higher consumption leads to lower price per unit). The FCAC and FCAC Rate Rider are a flat charge to customers per thousand pounds of steam consumed.[52] The existing NEFC levelized rate design consists of a fixed charge per square metre per month ($/m2/month) and a variable charge per megawatt hour of hot water consumption ($/MWh) with a cost allocation of 40 percent fixed/60 percent variable. Under the levelized approach, rate increases are smoothed in over time recognizing that the rates in the earlier years would not be sufficient to recover forecast revenue requirements due to the upfront costs incurred to install the required infrastructure to provide hot water service to initial customers and the expected future increase in customers and hot water load. The variances between approved revenue requirements and forecast revenues are recorded in the NEFC RDDA for recovery at a later date.[53] Under the Existing Rate Design, the NEFC system also has an approved NEFC Variance Deferral Account that captures the variances of certain operating cost components that are considered to be outside management's control.[54] The specific cost components are discussed further in Section 5.3.1.

Under its Proposed Rate Design, Creative Energy intends to consolidate the revenue requirements and rate base for the NEFC system with the Core Steam system and charge NEFC customers the same rates as are charged to Core Steam customers (i.e. Unified Rates). Creative Energy also proposes to charge NEFC customers only an NEFC System Contribution Charge to account for two items: (i) the costs to extend the Core Steam system to the NEFC system and (ii) the recovery of the NEFC RDDA balance as at December 31, 2021.[55] For clarity, the NEFC RDDA would be maintained to recover the December 31, 2021 balance over time, plus the ongoing cost of capital, but there would be no future additions with respect to the difference between the approved NEFC revenue requirement and the revenues at approved rates.[56]

The steps to the Proposed Rate Design consist of the following:[57]

1. Consolidate the revenue requirements of the Core Steam and NEFC systems as at December 31, 2021 and on a go-forward basis.[58]

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[50] Utility System Extension Test Guidelines dated September 5, 1996, Retrieved from: https://docs.bcuc.com/documents/Guidelines/2007/DOC_15386_1996_Utility_System_Extension_Test_Guidelines.pdf

[51] Exhibit B-1, Section 4.1.2, pp. 21–24; Exhibit B-9, RCIA IR 1.1.1; 2016–2016 NEFC RDA RRA decision, Section 3.3.2, p. 22.

[52] Creative Energy Steam Tariff, Revision 17, p. 17.

[53]Exhibit B-1,Section 2.2.1, p. 7; 2016–2017 NEFC RDA RRA decision p. 72.

[54] Exhibit B-1, Section 2.2.1, pp. 6–7.

[55] Exhibit B-1, Section 1.3, p. 4; Section 5.1, p. 30.

[56] Exhibit B-1, Section 5.1, p. 30, Footnote 15; 2021 NEFC RRA decision, Section 2.2, p. 5.

[57] Exhibit B-1, Section 5.1, p. 30.

[58] Exhibit B-11, BCUC IR 8.7, 25.1.

2. Treat the NEFC system as an extension to the Core Steam system, whereby a system extension test is conducted as at January 1, 2022, to determine the net cost to extend the Core Steam system to the NEFC system.[59]

3. Transfer the NEFC Variance Deferral Account balance to the NEFC RDDA as at December 31, 2021, and subsequently close the NEFC Variance Deferral Account.

4. Add the net cost of the extension to the net balance of the NEFC RDDA, effective January 1, 2022, and reduce the NEFC system revenue requirement allocated to the Core Steam system revenue requirement by this amount.

5. Recover both the net costs of the extension and the net NEFC RDDA separately and only from NEFC customers through an NEFC System Contribution Charge which is charged on a $/MWh basis, effective January 1, 2022.

6. Amend the existing tariff for the Core Steam system, effective January 1, 2022, such that it includes:
    a. A single rate schedule for both Core Steam and NEFC customers, where the thermal energy rates are based on the consolidated revenue requirements of the energy systems, adjusted to remove the net cost of the extension and the net balance of the NEFC RDDA, which is proposed to be recovered separately and only from NEFC customers; and
    b. An NEFC System Contribution Charge payable by NEFC customers only to recover the net cost of the extension and the net balance of the NEFC RDDA.

7. Rescind the existing NEFC tariff, effective January 1, 2022.

Creative Energy submits that the existing declining block thermal energy rate structure for the Core Steam system would be unchanged under the Proposed Rate Design and NEFC customers would be charged the equivalent rates and fuel cost charge as the customers of the Core Steam system.[60] While energy consumption and rates for Core Steam customers is metered in thousand pound of steam (M#), NEFC customers' energy consumption and rates will be measured in MWh, using a conversion factor of 0.347 MWh/M#.[61] NEFC customers would also be subject to an NEFC System Contribution Charge, which is discussed further in Section 3.1.[62]

The following table presents a summary of the indicative rate impacts, as amended by the Evidentiary Update, for customers connected to the Core Steam and NEFC systems under the Proposed Rate Design relative to the 2021 approved and 2022 interim rates, which are both under the Existing Rate Designs:

[59] Exhibit B-11, BCUC IR 8.7, 14.4.
[60] Exhibit B-1, Section 5.2.2, p. 31; Exhibit B-14, BCUC IR 57.2.1.
[61] Exhibit B-1, Section 4.1.2, p. 21, footnote 10; Section 5.2.2, p. 31; Exhibit B-14, BCUC IR 69.2.
[62] Exhibit B-1, Section 5.2.3, pp. 32–33.

Table 4: Summary of 2021 Permanent and 2022 Interim and Indicative Rates[63]

		2021	2022		
		Approved Permanent Under Existing Rate Design[64]	**Approved Interim Under Existing Rate Design[65]**	**Indicative Under Existing Rate Design**	**Indicative Under Proposed Rate Design[66]**
Core Steam					
Steam	Average $/M#	9.78	10.45	9.08	9.72
Fuel	Average $/M#[67]	12.50	18.50	18.50	18.50
Total	Average $/M#	22.28	28.95	27.58	28.22
	Average $/MWh[68]	64.21	83.42	79.48	81.33
NEFC Hot Water					
Fixed	$/m2/mo	0.33	0.36	0.36	n/a
Variable	$/MWh	63.04	69.34	69.34	81.33[69]
System Contribution Charge	$/MWh	n/a	n/a	n/a	9.50[70]
Total	Average $/MWh[71]	95.93	105.52	105.52	90.83

Creative Energy notes that, all else equal, the rates for customers connected to the Core Steam system under the Proposed Rate Design would be higher than rates under the Existing Rate Design. Whereas the rates under

[63] BCUC Order G-11-22; Exhibit B-14, Attachment BCUC IR 56.3. The rates presented under the Proposed Rate Design are based on the Rate Structure Model, and Creative Energy notes that the rates are indicative for comparison purposes (Exhibit B-14, BCUC IR 56.3).

[64] Core Steam System 2021 permanent rates were approved pursuant to BCUC Order G-310-21A. NEFC System 2021 permanent rates were approved pursuant to BCUC Order G-104-21.

[65] BCUC Order G-11-22.

[66] Under the Proposed Rate Design the rates, charged in the Core Steam service area would the be same as that charged in the NEFC service area, with the exception of the system contribution charge ($9.50/MWh) that is applicable to the NEFC service area only.

[67] The FCAC of $12.50/M# (thousand pounds) of steam was approved for the 2020–2021 gas year (BCUC Order G-295-20). This was revised to $15.40/M# of steam, effective November 1, 2021 (BCUC Order G-329-21). Subsequently, the BCUC approved a FCAC rate of $16.50/M# and a FCAC rate rider of $2.00/M#, effective February 1, 2022 through to January 31, 2023 (BCUC Order G-55-22).

[68] For customers connected to the hot water distribution network, a conversion factor of 0.347 MWh/M# is applied. Thus the 2021 approved permanent average rate $64.21/MWh = ($22.28/M#) / (0.347 MWh/M#). Reference: Exhibit B-1-1, Appendix B, Interim Tariff Page for Approval.

[69] Under the Proposed Rate Design, a single fuel charge rate would remain in effect to recover on a flow-through basis the costs of the bundled natural gas service provided by FEI under Rate 7. The fuel charge rate currently factors the NEFC load into rates, therefore this will not change under the Proposed Rate Design. Reference: Exhibit B-1, Section 5.2.1, p. 31.

[70] Creative Energy provides an NEFC System Contribution Charge of $9.50/MWh in the summary table of rates in response to BCUC IR 56.3 (Exhibit B-14), however in the Rate Structure Model filed as an attachment to Creative Energy's response to BCUC IR 56.3 (Exhibit B-14, BCUC IR 56.3, Attachment "Rate Structure Model – BCUC IR 56.3", Tab "RDDA Recovery", Cell C11), Creative Energy calculates an NEFC System Contribution Charge of $9.68/MWh.

[71] The Average $/MWh for NEFC is calculated by determining the annual revenues collected for each building customer through NEFC's fixed charge (floor area of each building multiplied by the fixed charge) and variable charge (annual load multiplied by the variable charge). These annual revenues are summed and divided by the forecast annual load of the NEFC system (19,566 MWh). Please refer to Exhibit B-14, Attachment BCUC IR 56.3 for additional details.

the Proposed Rate Design for customers connected to the NEFC system would be lower than rates under the Existing Rate Design.[72]

The indicative rates under the Existing Rate Design for the Core Steam system are lower than the rates approved on an interim basis under the Existing Rate Design, effective January 1, 2022, because the steam load forecast was amended as part of the Evidentiary Update. Refer to Section 4.1 for further details on the Amended Load Forecast. The indicative rates for the NEFC system are unchanged from those approved on an interim basis under the Existing Rate Design, because under the Existing Rate Design NEFC rates are not tied to load. The interim rates were established based on a 10 percent increase over the 2021 approved rates, consistent with BCUC-approved rate increases in 2020 and 2021.[73] The BCUC considered this level of increase was a reasonable approach to reducing additions to the NEFC RDDA while keeping the rate increase below the level typically associated with rate shock.[74]

In the following subsections, the Panel addresses issues arising with respect to the Proposed Rate Design, including the NEFC System Contribution Charge, classes of service, alternatives considered, and consultation activities. Following, the Panel makes its overall determination on the Proposed Rate Design.

3.1 System Contribution Charge

During the proceeding, interveners raised concerns with the System Contribution Charge and specifically, Creative Energy's proposal to recover certain cost elements separately and only from NEFC customers.[75] Under the Proposed Rate Design, Creative Energy seeks approval to establish an NEFC System Contribution Charge, effective January 1, 2022, to recover the following cost elements from customers connected to the NEFC system only:

Table 5: Cost Elements Recovered Through the System Contribution Charge[76]

System Contribution	NEFC RDDA	NEFC Variance Deferral Account
Reflects the net present value of the net incremental cost of the Core Steam system to serve customers connected to the NEFC system, calculated over a 22-year period.[77]	Captures BCUC-approved forecast revenue shortfalls for the NEFC system during the initial years of service due to the timing differences between the installation of the NEFC system and the forecast buildout of the service area.[78]	Captures variances between forecast and actual of the following NEFC cost components outside management's control: Steam service rates, fuel costs, distribution expenses, and income tax expenses.[79]
Balance (calculated) as at January 1, 2022:	Balance (as approved by the BCUC) as at December 31, 2021:	Balance (proposed) as at December 31, 2021:

[72] Exhibit B-1, Section 5.2.1, p. 31.
[73] Exhibit B-11, BCUC IR 44.9; BCUC Order G-227-20 and BCUC Order G-104-21.
[74] 2019–2020 Core and NEFC RRA decision accompanying BCUC Order G-227-20, Section 5.1, pp. 47, 50, 51.
[75] The CEC Final Argument, Section IV, para. 90–103, pp. 16–17; RCIA Final Argument, Section 2.1.3, p. 8.
[76] Exhibit B-1, Section 5.2.3, pp. 31–32.
[77] Exhibit B-1, Section 1.2, p. 3.
[78] Exhibit B-1, Section 2.2.1, p. 6.
[79] 2019–2020 Core and NEFC RRA decision accompanying BCUC Order G-277-20, Section 4.1, p. 42.

$474,356 debit balance[80]	$2,570,367 debit balance[81]	$465,235 credit balance[82]
Total to be recovered separately and only from NEFC customers by way of the System Contribution Charge commencing January 1, 2022:		**$2,579,488 debit balance**[83]

Creative Energy intends to adjust the NEFC System Contribution Charge as new load connects to the NEFC system and subject to BCUC approval.[84] It states that this will ensure the fair allocation of the remaining costs among all current and future NEFC customers. Creative Energy adds that the alternative would be to leave the NEFC System Contribution Charge at the same level, and instead, advance the timing of full cost recovery. However, Creative Energy submits that this latter approach could be regarded as unfair to existing customers. [85]

Creative Energy submits that the NEFC System Contribution Charge fairly allocates the costs between Core Steam and NEFC systems, recovers the NEFC RDDA balance,[86] and is simple, transparent and readily understood.[87]

The subsections below address the two individual components of the NEFC System Contribution Charge, specifically (i) the System Contribution, as determined by Creative Energy conducting a system extension test between the Core Steam and NEFC systems; and (ii) the ending 2021 balances of the NEFC RDDA and NEFC Variance Deferral Account.

System Contribution

Creative Energy submits that because the NEFC system will no longer transition to be functionally separate from the Core Steam system and will instead, remain as an extension to the Core Steam system, there exists an imbalance in the allocation of the costs to extend the Core Steam system to serve the NEFC customers.[88] As discussed in Section 2.0, the BCUC determined in the 2016–2017 NEFC RRA RDA Decision that for the initial phase, the NEFC service area would be treated as a customer of the Core Steam system and directed Creative Energy to include NEFC's load in the total steam service load forecast.[89] Creative Energy states that the inclusion of NEFC's load reduced rates for the existing Core Steam customers because the incremental cost to serve was borne, and continues to be borne entirely by the NEFC customers.[90] However, based on the change in circumstances where the NEFC system will remain an extension to the Core Steam system, Creative Energy

[80] Exhibit B-14, BCUC IR 56.3, Attachment "Rate Structure Model – BCUC IR 56.3", Tab "System Extension Cost Benefit", Cell C26.
[81] Exhibit B-11, BCUC IR 18.1.
[82] Exhibit B-11, BCUC IR 18.1. The variance deferral account credit balance offsets the debit balance of the System Contribution and NEFC RDDA.
[83] The total balance is a BCUC calculated amount based on the System Contribution ($474,356 debit balance) and net RDDA balance ($2,105,132 debit balance) (Exhibit B-14, BCUC IR 56.3, Attachment "Rate Structure Model – BCUC IR 56.3", Tab "System Extension Cost Benefit", Cell C26; Exhibit B-11, BCUC IR 18.1).
[84] Exhibit B-1, Section 5.2.3, p. 32.
[85] Exhibit B-14, BCUC IR 67.1.
[86] Exhibit B-1, Section 2.1.1, p. 5; Section 2.1.2, p. 5; Section 5.1, p. 30; Exhibit B-11, BCUC IR 14.2.
[87] Exhibit B-1, Section 5.2.3, p. 32.
[88] Exhibit B-11, BCUC IR 14.2.
[89] BCUC Order G-167-16 and accompany decision dated November 18, 2016, Section 3.3.2, p. 22.
[90] Exhibit B-9, RCIA IR 11.1.1; Exhibit B-14, BCUC IR 70.2.

proposes to apply the SET Guidelines on a go-forward basis to appropriately reflect the Core Steam system's obligation to service the NEFC customers.[91]

The SET Guidelines consider both the incremental revenues to be received from the customer as a result of the system extension, as well as the incremental cost to serve the extension.[92] A system contribution may be recovered from customers in situations where a given system extension creates a shortfall of benefits relative to costs.[93] Creative Energy calculates the incremental benefit and costs of extending the Core Steam system to serve the NEFC customers in accordance with the SET Guidelines and on a go-forward basis for the period of 2022 to 2043 (the remaining estimated useful life of the NEFC assets) based on the forecast load and cost of service for the Core Steam and NEFC systems.[94] Specifically, the process used by Creative Energy to calculate the System Contribution is summarized below:

Table 6: System Contribution Calculation[95]

Step 1	**Determine Core System Rates without Existing NEFC Load** Remove the existing benefit of the NEFC's system load from the current forecast rates for the Core Steam system (i.e. calculate the Core Steam System rates under the assumption that the NEFC system is not a customer).
Step 2	**Calculate the Incremental Revenue Benefit** Calculate the net present value of the incremental revenue benefit to the Core Steam system of connecting the NEFC system customers on a go-forward basis. The net present value is calculated using an interest rate equivalent to Creative Energy's weighted average cost of capital.
Step 3	**Calculate the Incremental Cost to Serve** Calculate the net present value of the incremental costs to serve the NEFC system customers on a go-forward basis. These include the forecast annual components of the NEFC's system cost of service, apart from fuel costs (i.e. Operations and Maintenance (O&M) expense, municipal taxes, income tax, depreciation expense, return on rate base) for each year from 2022 to 2043 (22 years). The are no elements of NEFC's cost of service that are reduced or eliminated under the Proposed Rate Design, apart from fuel costs.[96] The net present value of the incremental cost to serve is calculated using an interest rate equivalent to Creative Energy's weighted average cost of capital.
Step 4	**Calculate the Benefit (Cost) of the System Extension** Subtract the net present value of the incremental costs to serve the NEFC system customers from the incremental revenue benefit of connecting the NEFC system customers. Extending the Core Steam system to connect the NEFC customers is partially addressed through the unified rates with the remainder of the costs to be addressed through a financial contribution (i.e. System Contribution) from the NEFC customers.

Creative Energy provides the following long-term load forecast for the Core Steam and NEFC systems from 2022 to 2043. The long-term load forecast is used as an input to calculate the System Contribution.

[91] Exhibit B-1, Section 2.1.1, p. 5; Section 2.1.2, p. 5; Exhibit B-11, BCUC IR 14.2.
[92] SET Guidelines, Section 6.1, p. 23.
[93] Ibid.
[94] Exhibit B-1, Section 4.1.1, p. 19; Exhibit B-11, BCUC IR 14.5.
[95] Exhibit B-14, BCUC IR 56.3, Attachment "Rate Structure Model – BCUC IR 56.3", Tab "System Extension Cost Benefit".
[96] Exhibit B-11, BCUC IR 25.1.1; Exhibit B-14, BCUC IR 70.2 and 73.1.

Table 7: Long Term Load Forecast for the Core Steam and NEFC Systems (2022 – 2043)[97]

	2022	2023	2024	2025	2026–2043
Core Steam System load without NEFC (MWh)	383,707	387,907	387,907	390,507	366,012
NEFC System load at Customer Buildings (MWh)	19,566	19,566	19,566	19,566	19,566

Creative Energy states that the long-term load forecast for the Core Steam system was intended to be consistent with the forecast presented in Creative Energy's 2021 Long Term Resource Plan and notes there are immaterial differences between that presented in the 2021 Long Term Resource Plan and that used to calculate the System Contribution in the rates model attached to Exhibit B-14.[98] It adds that changes in the long-term load forecast for the Core Steam system are expected between 2022 and 2026, primarily due to the expected loss of load from the pending closure of St. Paul's Hospital.[99] In Creative Energy's view, these changes are immaterial for the purposes of rate design decision making.[100] Creative Energy also states that the NEFC long-term load forecast for the existing four customers closely aligns with 19,566 MWh, the forecast demand for 2022.[101] Creative Energy recognizes the uncertainty in the long-term load forecast, but notes that the proposed load forecast is fair and reasonable for the purposes of informing the allocation of the costs to extend the Core Steam system to serve the NEFC service area.[102] It adds that the system extension test applied is inherently robust for rate design purposes, even when acknowledging the uncertainty of the long-term load forecasts.[103]

A summary of the results of a system extension test for the Core Steam system extension to serve the NEFC customers is presented in Table 8 that follows. Results are presented on an equivalent average $/MWh basis both for simplicity and for ease of rate comparisons, only select years are presented.[104]

Table 8: Core Steam System Extension to the NEFC Service Area (2022–2043)[105]

Select Years Only

NEF System Extension – Benefits and Costs	NPV[106]	Year 1 2022	Year 5 2026	Year 10 2031	Year 15 2036	Year 22 2043
[A] Forecast Core Revenue Requirements	*n/a*	10,386,558	12,162,729	13,428,635	14,826,298	17,030,757
[B] Core Load without NEFC (MWh)	*n/a*	383,707	366,012	366,012	366,012	366,012
[C] NEFC Load at Customer Building (MWh)	*n/a*	19,566	19,566	19,566	19,566	19,566
[D] Core Steam Rate w/ NEFC System Load ($/MWh)	*n/a*	25.50	31.22	34.47	38.05	43.71
[E]Core Steam Rate w/o NEFC System Load ($/MWh)	*n/a*	27.07	33.23	36.69	40.51	46.53

97 Exhibit B-14, BCUC IR 56.3, Attachment "Rate Structure Model – BCUC IR 56.3", Tab "System Extension Cost Benefit", Excel Row 11 (Core Steam system load without NEFC); Excel Row 15 (NEFC system load).
98 Exhibit B-14, BCUC IR 71.7.
99 Exhibit B-11, BCUC IR 20.3.
100 Exhibit B-14, BCUC IR 71.7 and 72.4.
101 Exhibit B-11, BCUC IR 21.2.2.
102 Exhibit B-14, BCUC IR 70.2.
103 Exhibit B-14, BCUC IR 70.3.2.
104 Exhibit B-1, Section 4.1.2, p. 21.
105 Exhibit B-14, BCUC IR 56.3, Attachment "Rate Structure Model – BCUC IR 56.3", Tab "System Extension Cost Benefit", line 7, 8, 9, 11, 15, 17, 20, 23; Tab "Cost of Service Summary", line 36.
106 The net present value was discounted at a rate based on Creative Energy's weighted average cost of capital of 6.34 percent. Exhibit B-14, BCUC IR 56.3, Attachment "Rate Structure Model – BCUC IR 56.3", Tab "System Extension Cost Benefit", cell C4.

[F] Difference ($/MWh)	*n/a*	1.57	2.01	2.22	2.45	2.82
[G] Incremental Benefit of NEFC Load ($)	8,150,918	529,619	650,170	717,840	792,554	910,395
[H] Incremental Cost of Extension ($) (Cost of Service)	8,625,273	803,975	770,696	729,851	688,589	636,553
[I] Net Benefit (Cost –System Contribution) ($)	(474,356)	(274,356)	(120,526)	(12,011)	103,964	273,842

Under the Existing Rate Design, the rates for the Core Steam system with NEFC as a customer are lower than they otherwise would be as illustrated in lines [D] through [F] in Table 8 above. In treating the NEFC system as an extension and applying the SET Guidelines, the costs are rebalanced such that the incremental costs of the connecting customer are reduced up to the level of incremental revenues to be received from the customer.[107]

The anticipated incremental costs are greater than the expected incremental revenues (benefit) over the system extension test period of 22 years. Based on this, Creative Energy notes that extending the Core Steam system to connect NEFC customers results in a required system contribution from NEFC customers.[108]

Ending 2021 Balance of the NEFC RDDA and NEFC Variance Deferral Account

Creative Energy proposes to add the ending 2021 balance of the NEFC Variance Deferral Account to the NEFC RDDA, to be recovered through the NEFC System Contribution Charge. The balance of the NEFC RDDA as approved by the BCUC to the end of 2021 is $2,570,367 (debit balance). The proposed 2021 additions to the NEFC Variance Deferral Account are $205,105 (debit), which including interest, results in a credit balance of $465,235 as at December 31, 2021. [109]

As discussed above in this decision, the NEFC RDDA was put in place to address the timing differences between the installation of the required infrastructure to service the thermal energy demand of the NEFC system and the forecast buildout of the NEFC service area over time. The purpose of the NEFC RDDA was ultimately to support a levelized rate design to smooth rate increases over time, recognizing that rates would not initially recover the approved cost of service.[110] The NEFC Variance Deferral Account was put into place to capture variances between specific forecast and actual operating cost components that are outside management's control.[111]

Creative Energy states that it is appropriate to add the ending 2021 NEFC Variance Deferral account balance to the NEFC RDDA and recover the balance through the NEFC System Contribution Charge, as this approach is simple, transparent and readily understood. Further, this approach would complement the Proposed Rate Design and avoid any considerations about accrued costs for the NEFC system, as well as which NEFC customers ought to recover which costs.[112]

As part of this approach, Creative Energy requests approval to cancel the NEFC Variance Deferral account, effective January 1, 2022, and confirms there will not be any further additions to the NEFC RDDA after 2021. The NEFC RDDA would remain in effect only for the purpose of holding the balance of the System Contribution and the ending 2021 balances of the NEFC RDDA and NEFC Variance Deferral Account until the balance is fully amortized through the NEFC System Contribution Charge at the end of the 22-year period.[113]

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[107] Exhibit B-1, Section 4.1.2, p. 23; Exhibit B-14, BCUC IR 65.2; SET Guidelines, Section 6.5, pp. 27–28.
[108] Exhibit B-1, Section 4.1.2, pp. 23–24; SET Guidelines, Section 6.5, pp. 27–28.
[109] Exhibit B-11, BCUC IR 18.1; 2021 NEFC RRA Decision, Section 2.2, p. 9.
[110] Exhibit B-1, Section 2.2.1, p. 6.
[111] Exhibit B-1, Section 2.2.1, pp. 6–7.
[112] Exhibit B-1, Section 5.2.3, p. 32.
[113] Exhibit B-1, Section 1.1, p. 1; Exhibit B-11, BCUC IR 17.8.

Positions of the Parties

RCIA disagrees that "NEFC customers should be responsible for bearing the residual balance" and submits that in the absence of more compelling evidence, the "residual RDDA balance is the responsibility of Creative Energy's shareholders."[114]

In reply, Creative Energy claims that RCIA is confusing the purpose and operation of the existing NEFC RDDA and the proposed System Contribution. Creative Energy notes that the NEFC RDDA was established to smooth rates under the NEFC levelized rate design, and that it is seeking approval to add this outstanding balance to the System Contribution that is to be recovered separately and only from NEFC customers through the NEFC System Contribution Charge. Creative Energy adds that RCIA "does not refer to any regulatory practice, principle or precedent in support of its position that a 'residual balance' of NEFC extension costs should not be recovered in rates."[115]

RCIA also submits that Creative Energy "willingly undertook construction of the NEFC extension in pursuit of its own business objectives without first receiving BCUC approval" of the NEFC NEA, and therefore, "Creative Energy accepted the capital investment risk associated with the NEFC extension [under] the circumstance that the [NEA] was not approved." Based on this, RCIA considers that the ultimate responsibility for any unrecoverable NEFC extension capital costs rests with Creative Energy's shareholders, not with NEFC or Core System customers.[116]

Creative Energy responds that the NEFC system was built according to the project parameters and design as approved by the BCUC in the 2015 NEFC CPCN Decision.[117] It adds that the NEFC system has been operating for approximately five years, and RCIA's submission is the first time there has been a suggestion of imprudence with respect to its construction. Creative Energy considers it is "unprecedented" to have a party "allege, some five years after a system extension came into service […], that the utility acted imprudently […]." It adds that the BCUC has an "established process for inquiring into an allegation of an imprudent utility decision", and an "established test" for determining if there is justification to disallow recovery of a portion of the project costs. Creative Energy notes that these processes have not been followed in this proceeding and that there is no evidence to support RCIA's position.[118]

The CEC notes that the analysis supporting the calculation of the System Contribution should compare the incremental revenues against additional costs.[119] The CEC notes that since the revenues from the NEFC system are already being received as a customer by the Core Steam system, and have been for some time, there would

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114 RCIA Final Argument, section 2.1.3, p. 8.
115 Creative Energy Reply, Section 2.3, p. 5, para. 10.
116 RCIA Final Argument, section 2.1.2, p. 7.
117 Creative Energy Reply, Section 2.3, p. 5, para. 10.
118 Creative Energy Reply, Section 2.3, p. 7, para. 10.
119 The CEC Final Argument, Section IV, para. 93–94, p. 16.

effectively be no new incremental revenues arising from the system extension occurring in 2022, however, there would be substantial incremental costs.[120]

The CEC notes that it presented evidence from the 2015 NEFC CPCN proceeding which indicated that under a hypothetical scenario where NEFC customers were to be charged the equivalent rates of the Core Steam system, a contribution in aid of construction (CIAC) of $1.4 million would have been required from the NEFC customers. Creative Energy was unable to reconcile the difference between the CIAC of $1.4 million and the proposed System Contribution noting that the staff that were involved in the preparation of the 2015 NEFC CPCN are no longer with the company.[121] The CEC finds the difference between the CIAC from the 2015 NEFC CPCN proceeding and the proposed System Contribution in the current Application to be significant, and warrants rejection of the Creative Energy's proposed System Contribution.[122] It adds that if the BCUC decides to approve the Proposed Rate Design, then it should be considered as a current system extension, with the System Contribution established based on a system extension test that accurately reflects the change to the costs and the incremental change to the revenues that would occur on a go-forward basis.[123]

Creative Energy did not reply to the submissions made by the CEC.

Panel Determination

The Panel approves Creative Energy's proposal to consolidate the costs of service and unify the rate base and rates for the NEFC system with the Core Steam system. The Panel provides its reasons for this overall determination on the Proposed Rate Design in Section 3.6 and specifically addresses the System Contribution Charge below in this section.

The proposed System Contribution Charge is designed to recover two components from NEFC customers over the remaining life of the NEFC assets (i.e. 22 years): (i) the System Contribution, effective January 1, 2022; and (ii) the balance of the NEFC RDDA and NEFC Variance Deferral Account at December 31, 2021.

With respect to the System Contribution, the Panel acknowledges that transition of the NEFC system to a functionally separate low-carbon utility as planned at the time of the 2015 NEFC CPCN has not occurred, and the NEFC system will remain as an extension to the Core Steam system. Given this change in circumstances, the Panel considers that treating the NEFC system as an extension and using the SET Guidelines on a go-forward basis to determine the Core Steam system's net incremental costs to serve the NEFC customers is a reasonable and appropriate approach to allocating the costs and benefits to the existing Core Steam and NEFC system customers. The Panel considers that Creative Energy has calculated the costs and benefits of extending the Core Steam system to serve the NEFC system customers, including the resulting System Contribution, in accordance with the SET Guidelines.

The Panel disagrees with the CEC's position that the incremental revenues currently being received by the Core Steam system from NEFC should be excluded from the system extension analysis. The SET Guidelines recommend that the "analysis of system extensions be based on full incremental costs and benefits."[124] Based

[120] The CEC Final Argument, Section IV, para. 95, p. 16.

[121] Exhibit B-15, The CEC IR 29.1.

[122] The CEC Final Argument, Section IV, para. 98–103, p. 17.

[123] The CEC Final Argument, section IV, para. 103, p. 17.

[124] SET Guidelines, Section 4.1, p. 12.

on this, the Panel expects that to evaluate the NEFC system as an extension on a go-forward basis, all of the utility's incremental costs and expected revenues of this system should be considered to ensure that the costs are reasonably allocated between the Core Steam and NEFC systems. The Panel appreciates that the NEFC system has been connected to the Core Steam system since commencement. However, the NEFC system was not previously assessed as an extension given the connection was expected to be temporary in nature, until the NEFC system was transitioned to a new low-carbon energy fuel source. Given the planned transition has not occurred and is not expected to occur, the Panel acknowledges that treating the NEFC system as an extension on a go-forward basis is a reasonable approach and that it is appropriate to view the NEFC system as though it is a new customer of the Core Steam system.

The Panel disagrees with the CEC's comment that the difference between the CIAC in the 2015 NEFC CPCN proceeding and the System Contribution presented in the Application under the Proposed Rate Design warrants rejection of the proposed contribution. The Panel considers that Creative Energy has provided the expected incremental costs and revenues from the NEFC system on a go-forward basis where the NEFC system will operate as an extension to the Core Steam system. The Panel notes that the CIAC calculation in the 2015 NEFC CPCN was based on a set of assumptions that did not materialize and the current plan for NEFC is significantly different. Accordingly, the Panel does not consider the 2015 CIAC calculation to be of relevance in the current proceeding. Based on this the Panel does not consider that rejecting the System Contribution due to the differences between the CIAC put forward in the 2015 NEFC CPCN proceeding and the System Contribution is reasonable.

Based on the above reasons, **the Panel finds the proposed System Contribution put forward by Creative Energy in the Application to be reasonable.** The Panel acknowledges that the 2022 Core Steam revenue requirements is one of several inputs into the System Contribution calculation and Creative Energy proposed several adjustments during the regulatory process. Accordingly, **the Panel directs Creative Energy to re-calculate the System Contribution, effective January 1, 2022, with a 2022 revenue requirement figure that is adjusted to reflect the directions and determinations in Section 4.2 of this decision.**

With respect to the balance of the NEFC RDDA and Variance Deferral Account, the Panel acknowledges that recovering these amounts as part of the NEFC System Contribution Charge appropriately allocates these costs to the NEFC system customers. It is simple, effective, and immediately reduces the NEFC RDDA balance that is to be recovered solely from the NEFC customers. The Panel recognizes that future customers connecting to the NEFC system will benefit from the reduced RDDA balance being recovered over the 22-year amortization period, however, the NEFC Variance Deferral Account balance is significantly less than the NEFC RDDA balance. And apart from the potential new low-carbon energy to service the City of Vancouver's Neighbourhood Energy Utility in the NEFC area, which may connect directly to the Core Steam system, Creative Energy did not identify any future load prospects for the NEFC service area.[125] **The Panel approves the transfer of the NEFC Variance Deferral Account balance at December 31, 2021 to the NEFC RDDA and closure of the NEFC Variance Deferral Account.** The Panel acknowledges that under this approach, there will be no additions to the NEFC RDDA beyond the implementation date of the Proposed Rate Design.

With respect to the System Contribution Charge, Creative Energy proposes to add the System Contribution to the RDDA and recover the total balance from NEFC customers over the remaining life of the NEFC assets (i.e. 22

[125] Exhibit B-1, Section 3.1.1, pp. 13–14; Section 3.2, pp. 14–15; Exhibit B-11, BCUC IR 16.2; Exhibit B-14, BCUC IR 58.1.

years), effective January 1, 2022. The Panel considers that this is a straightforward, efficient approach to recover the costs associated with the NEFC system from the customers connected to that system. Further, Creative Energy's proposal to adjust the NEFC System Contribution Charge as new load connects to the NEFC system is reasonable. The Panel considers that this approach will ensure that both the initial and any potential new customers will appropriately contribute to the cost of the system extension with respect to the services to be received over the remaining depreciable life of the assets. Accordingly, **the Panel approves Creative Energy to charge customers connected to the NEFC system a System Contribution Charge, effective January 1, 2022. The System Contribution Charge will recover the balance of the NEFC RDDA at January 1, 2022, which is comprised of the NEFC System Contribution at January 1, 2022 and the December 31, 2021 balance of NEFC RDDA and the NEFC Variance Deferral Account.**

The Panel observes that the long-term load forecast for the Core Steam and NEFC systems is a key input of the System Contribution Charge that is calculated on a net present basis over a 22-year period. Creative Energy states that the long-term load forecast of the Core Steam system is consistent with the 2021 LTRP, and the Panel notes that the BCUC rejected Creative Energy's 2021 LTRP stating that it was not in the public interest.[126] Notwithstanding this, the Panel acknowledges that the long-term load forecast used for resource planning may not necessarily be equivalent to one used for the purposes of calculating the System Contribution. The Panel considers that the long-term load forecasts for the Core Steam and NEFC systems as provided in the rates model attached to Exhibit B-14 are reasonable for the purposes of calculating the System Contribution in this proceeding, however, acknowledges that long-term load forecast for each of the systems will change over time. Accordingly, **the Panel directs Creative Energy to provide the following in future RRAs:**

- **A revised long-term load forecast for both the Core Steam and NEFC systems for the purposes of re-calculating the NEFC System Contribution Charge and a re-calculated NEFC System Contribution Charge based on the revised long-term load forecasts. If Creative Energy comes forward with a multi-year RRA, the Panel directs Creative Energy to explain how the System Contribution Charge will be addressed should new load connect to the NEFC system during the corresponding test period.**
- **The calculation and annual balance of the components recovered through the System Contribution Charge, including the NEFC System Contribution Charge and the NEFC RDDA net of the NEFC Variance Deferral Account.**

The Panel rejects RCIA's view that Creative Energy constructed the NEFC system "without first receiving BCUC approval" or that the ultimate responsibility for recovery of the NEFC RDDA and System Contribution rests with Creative Energy's shareholders. The Panel observes that the NEFC system was approved by CPCN and built to meet the load growth expected at the time of the 2015 NEFC CPCN Decision. The Panel accepts that the load growth did not materialize as expected, however, this outcome does not result in a decision-making process that is imprudent. Further, no evidence was provided of imprudent decision making, and in the Panel's view, given a CPCN was granted, disallowing the recovery of these costs would be inconsistent with the regulatory compact where a utility is afforded a reasonable opportunity to earn a fair return on its invested capital.

[126] BCUC Order G-283-21 and the accompanying decision for Creative Energy's 2021 Long Term Resource Plan, Section 5.0, p. 35.

3.2 Classes of Service

The Proposed Rate Design is based on the premise that Creative Energy offers one class of service to customers connected to both the Core Steam and NEFC systems. Specifically, Creative Energy states that NEFC customers receive the same service, being the provision of thermal energy for space and domestic hot water heating, as all customers connected to the Core Steam system. It adds that all thermal energy requirements for the Core Steam and NEFC customers are supplied by the Core Steam Plant.[127]
As noted above, the BCUC approved the Existing Rate Design for the NEFC system in the Creative Energy 2016–2017 NEFC RRA RDA Decision. As part of the 2016–2017 NEFC RRA RDA Decision, the BCUC noted that Creative Energy "treats steam (Core Steam system) customers and hot water (NEFC) customers as two separate classes of service"[128] and that: [129]

> Creative Energy believes NEFC should be treated differently from other [Core Steam system] customers with regard to determining the fuel costs charge because it is not a retail customer but rather, a large expansion of [Creative Energy's] system. Creative Energy further explains that NEFC should be treated differently because they are a different service class and, in addition, should not benefit from the balance of the [Fuel Cost Stabilization Account].

The BCUC was not persuaded that the NEFC system was a different class of service and directed Creative Energy's Core Steam system to charge NEFC for fuel through the Core Steam system's BCUC-approved FCAC, with any variance between actual and forecast fuel to provide NEFC with steam captured in the Core Steam system's Fuel Cost Stabilization Account, as it would any other steam service customer.[130]

Classes of service as it relates to the setting of rates are contemplated in Section 60(1)(c) of the UCA, which states:

> if the public utility provides more than one class of service, the commission must
>
> (i) segregate the various kinds of service into distinct classes of service,
>
> (ii) in setting a rate to be charged for the particular service provided, consider each distinct class of service as a self contained unit, and
>
> (iii) set a rate for each unit that it considers to be just and reasonable for that unit, without regard to the rates set for any other unit.

Creative Energy states that at the time of the 2016–2017 NEFC RRA RDA, the NEFC system was not intended to be an extension to the Core Steam system. Instead, the buildings connected to the NEFC system were intended to become customers of a new functionally separate utility. The NEFC system was established to facilitate this transition. Creative Energy acknowledges that this initially planned transition has not occurred, and the change in circumstances means that the NEFC system is and will remain an extension to the Core Steam system.[131]

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[127] Exhibit B-11, BCUC IR 11.1; Exhibit B-14, BCUC IR 65.1.
[128] 2016–2017 NEFC RRA RDA Decision, p. 1.
[129] 2016–2017 NEFC RRA RDA Decision, p. 65.
[130] 2016–2017 NEFC RRA RDA Decision, p. 65.
[131] Exhibit B-11, BCUC IR 14.2.

As noted above, Creative Energy states that the service provided to its customers connected to each of the Core Steam and NEFC systems is thermal energy for space and domestic hot water heating.[132] From a technical perspective, all the thermal energy provided to Creative Energy's customers is generated at the Core Steam Plant.[133] Specifically, the thermal energy is distributed from the Core Steam Plant as steam through a distribution network of pipes connecting all Core Steam customers. To provide service to NEFC customers, the thermal energy from the Core Steam Plant is first transferred to the NEFC distribution network at existing steam to hot water conversion stations. The NEFC distribution network then distributes thermal energy to NEFC customers by circulating hot water between the steam to hot water conversion stations and the customer buildings.[134]

Creative Energy notes some differences between the delivery of thermal energy in the form of steam (i.e. Core Steam system) compared to hot water (i.e. NEFC distribution network) including:

- Steam distribution systems deliver thermal energy at a much higher temperature and experience higher thermal losses at the plant and during delivery.[135]
- Hot water distribution systems require a wider utility corridor to deliver an equivalent capacity of thermal energy as steam distribution systems.[136]
- At the customer building, Creative Energy states that heat exchanger equipment appropriate for higher temperatures are required when connected to a steam distribution system as compared to a hot water distribution system.[137]

Creative Energy provides thermal energy to its customers, which it delivers through distribution networks in the form of steam or hot water. The delivered thermal energy is provided to customers through heat exchangers, however, it is estimated that six Core Steam customers use steam directly within their buildings because they require a higher temperature for their operations. Creative Energy notes that it does not offer customers a choice of thermal energy delivered in the form of steam versus hot water in the Core Steam service area.[138]

Positions of the Parties

Interveners did not comment on whether steam and hot water are considered separate classes of service.

Panel Discussion

In considering whether the Core Steam and NEFC systems are the same class of service, the Panel considers this in the context of the definition of a "public utility" and "service", defined in the UCA as follows:

> Section 1 of the UCA defines "public utility" to mean a person, or the person's lessee, trustee, receiver or liquidator, who owns or operates in British Columbia, equipment or facilities for

[132] Exhibit B-11, BCUC IR 11.1; Exhibit B-14, BCUC IR 65.1.
[133] Exhibit B-11, BCUC IR 11.1.
[134] Exhibit B-14, BCUC IR 62.1.1.
[135] Exhibit B-14, BCUC IR 62.3.
[136] Exhibit B-14, BCUC IR 62.3.
[137] Exhibit B-14, BCUC IR 62.4.
[138] Exhibit B-14, BCUC IR 62.4 and 62.4.1.

(a) the production, generation, storage, transmission, sale, delivery or provision of electricity, natural gas, steam or any other agent for the production of light, heat, cold or power to or for the public or a corporation for compensation, […]

Section 1 of the UCA defines "service" as including:

(a) the use and accommodation provided by a public utility,

(b) a product or commodity provided by a public utility, and

(c) the plant, equipment, apparatus, appliances, property and facilities employed by or in connection with a public utility in providing service or a product or commodity for the purposes in which the public utility is engaged and for the use and accommodation of the public;

Creative Energy produces steam by burning natural gas and then uses some of this steam to provide heat to the hot water distribution system in NEFC. The steam and hot water are then used to provide thermal energy, or heat, to its customers. Creative Energy owns the plant and equipment and levies a rate for the thermal services it provides. The Panel is satisfied that Creative Energy meets the definition of a public utility as defined by the UCA. Further, the thermal energy that Creative Energy provides to its customers through its plant and equipment meets the definition of a service.

Section 60(1)(c) of the UCA contemplates a public utility offering more than one class of service and makes clear that where it is offering more than one class of service, the BCUC must segregate the various classes of service into distinct classes of service and set a rate(s) for each class of service that is just and reasonable for that specific class of service, without regard to the rates that are or may be charged for the other classes of service.

The Panel considers it necessary to distinguish the difference between a "class of service" and a "customer class" (also referred to as rate class or class of customers). As an example, if a public utility provides electric distribution service and natural gas distribution service through one corporate entity, the Panel considers such a utility would be providing two distinct regulated business activities. Each of these distinct activities would require substantially distinct infrastructure from the other, with distinct risks and costs of service, therefore, it would be appropriate to consider these as two distinct classes of service (electric distribution and gas distribution), with two corresponding revenue requirements, rate bases and separate sets of rates for each of the two classes of service. For each class of service provided by the public utility, customer rates would be differentiated as necessary, by cost and/or nature of service, with the customers segregated into different customer classes, such as residential; commercial; industrial; firm; interruptible; bundled sales; or transportation service.

The BCUC's Alternative Energy Services (AES) Inquiry[139] noted that a separate class of service may be necessary when some or all of the following characteristics are present: (i) a new activity largely uses and is dependent on the underlying utility infrastructure but there are clearly identifiable costs and/or assets that pertain specifically to the additional activity; (ii) the risk of the new activity differs from the risk faced by the underlying utility; and (iii) an identifiable customer base is served by the new activity. The Panel acknowledges that the AES Inquiry

[139] FEI Inquiry regarding the Offering of Products and Services in Alternative Energy Solutions and Other New Initiatives (AES Inquiry), AES Report, Section 2.3.2.2, p. 28.

addressed new and potentially non-regulated businesses, however, the Panel considers that the principles are generally the same when determining whether a separate class of service ought to be established.

The Panel observes that the costs, assets, and customer base for each of the Core Steam and NEFC systems are identifiable and have been separately reported as such in past RRAs. However, from a technical perspective, both the Core Steam and NEFC systems carry out the same primary activity, which is providing thermal energy for heating to customers connected to the steam and hot water distribution network through the Core Steam Plant. The primary difference between the energy systems is the heating medium that provides the thermal energy to the customers directly connected to each of the systems, where the Core Steam system uses steam and the NEFC system uses hot water on the utility side of the meter. The Panel considers that the medium used to provide the thermal energy to end-use customers does not substantially change the underlying risk of providing thermal energy nor does it sufficiently constitute that the two interconnected energy systems should be considered separate classes of service. The Panel acknowledges that Creative Energy has identified some differences in the assets required to deliver thermal energy in the form of steam compared to hot water, however, the Panel considers that these differences do not result in a fundamentally different risk profile. Furthermore, the service provided to customers, whether connected to the Core Steam or NEFC system, is the same, being the provision of thermal energy.

The Panel recognizes that a reason for separate classes of service is to address cost causality such that customers only share costs that are attributable to their class of service and to prevent cross-subsidization when determining rates. Separate classes of service facilitate the appropriate allocation of costs to customers of the service and allows for greater transparency when determining costs and rates. The Panel accepts that as the NEFC system is integrated into the existing Core Steam system, the allocation of costs may require more complex methodologies and more detailed scrutiny of the activities than would be the case if they were less integrated. In the Panel's view, Creative Energy's system extension analysis and resulting NEFC System Contribution Charge reasonably allocate the cost differentials between the energy systems and as such, separating the energy systems into separate classes of service is not required, and the Core Steam and NEFC system should be considered one class of service. The Panel notes that adding a charge for a set period of time, such as the NEFC System Contribution Charge, to a subset of customers does not warrant a separate class of service for that subset of customers.[140]

3.3 Alternative Rate Designs Considered for NEFC

As noted in Section 3.0, the Proposed Rate Design is intended to address the issues raised by the BCUC in the 2019–2020 Core and NEFC RRA Decision in relation to load growth uncertainty and the recovery mechanism for the NEFC RDDA. However, Creative Energy also considered an alternative to the Existing Rate Design, whereby the NEFC system maintains its own revenue requirements separate from the Core Steam system and the NEFC RDDA balance is addressed (Standalone Redesign). While Creative Energy identified the Standalone Redesign alternative, it did not recommend this approach because the Proposed Rate Design offered several benefits over the Standalone Redesign, including:[141]

[140] An example of this is the extra charge British Columbia Hydro and Power Authority and FortisBC Inc. customers pay for the radio-off advanced/smart meter option to manually read the meters but doing so does not result in a separate class of service for this subset of customers.
[141] Exhibit B-1, Section 1.1, pp. 2–-3.

- Rates that are practical, intuitive and aligned to the nature of service provided, and which promote customer understanding and acceptance; and
- Reduced complexity and burden for future revenue requirements and rate design applications.

Creative Energy notes that under the Existing Rate Design, the NEFC fixed charge ($/square metre) does not align with the key driver of fixed costs. The fixed charge currently recovers costs per square metre of floor space, which assumes that all building customers have the same demands on the utility on a per square metre basis, while Creative Energy submits that the cost to serve individual buildings of a given size will differ according to the energy efficiency of the building.[142]
Under the Standalone Redesign, the proposed cost recovery for the variable and fixed charge would be restructured as follows:

1. The variable charge would recover those costs that are directly attributable to the energy consumption (i.e. steam and fuel inputs) as a direct flow-through on a $/ MWh basis. This would require that the NEFC Variance Deferral Account remain in place to record variances between forecast and actual steam and fuel costs thus ensuring full and stable recovery of the steam and fuel costs.[143]
2. The fixed charge would be changed such that those costs that do not vary with energy consumption (e.g. O&M, taxes, return on capital, etc.) (fixed costs) are recovered on a basis of installed peak capacity ($/kilowatt (kW)).[144]

Creative Energy notes that under the Standalone Redesign, the fixed charge would need to be set on a levelized basis over the remaining useful life of the current NEFC assets to ensure recovery of the fixed costs of the NEFC system plus the recovery of the existing NEFC RDDA balance. This approach would mitigate the risk of a growing NEFC RDDA balance due to load growth uncertainty. It adds that consistent with a levelized approach, rates would be reduced for all customers over the remaining term as new load connects, thereby ensuring fair, predicable and stable recovery of the fixed costs.[145]
Creative Energy states that this approach is consistent with other energy systems owned and operated by Creative Energy and its parent CEDLP (i.e. the heating thermal energy system and district cooling system at the Vancouver House Development; and the district cooling system at the Main Alley Development).[146]

The following table compares the rates under the Standalone Redesign, the Proposed Rate Design and the Existing Rate Design for the NEFC customers.

Table 9: Summary of Indicative NEFC Rates Under the Standalone Redesign[147]

	2021	2022	
	Approved	**Approved**	**Alternatives**

[142] Exhibit B-1, Section 4.2.3, p. 27.
[143] Exhibit B-1, Section 4.2.1, p. 25.
[144] Exhibit B-1, Section 4.2.2, pp. 25–-26; Section 4.2.3, p. 27.
[145] Exhibit B-1, Section 4.2.2, p. 26.
[146] Exhibit B-1, Section 4.2.2, p. 26; BCUC Order G-222-21 and accompanying decision; BCUC Order G-242-22 and accompanying decision
[147] Exhibit B-14, Attachment BCUC IR 56.3. The rates presented are based on the Rate Structure Model, and Creative Energy notes that the rate are indicative for comparison purposes (Exhibit B-14, BCUC IR 56.3).

		Permanent Under Existing Rate Design [148]	Interim Under Existing Rate Design [149]	Indicative Under Existing Rate Design	Indicative Under Standalone Redesign[150]	Indicative Under Proposed Rate Design
Fixed Variable	$/m2/mo or **$/kW/mo** $/MWh	0.33 63.04	0.36 69.34	0.36 69.34	**4.66** 85.43	n/a 81.33
System Contribution	$/MWh	n/a	n/a	n/a	n/a	9.50[151]
Total	Average $/MWh[152]	95.93	105.52	105.52	118.58	90.83

Creative Energy considered a transition mechanism to mitigate the rate increase (approximately 12 percent) under the Standalone Redesign, however, determined that it would not be required given the 10 percent rate increase approved on an interim basis under the Existing Rate Design, effective January 1, 2022.[153]

Creative Energy notes that in evaluating NEFC standalone alternatives, it did not consider a declining or inclining rate structure noting that these alternatives would not have addressed the concerns raised by the BCUC in the 2019–2020 Core and NEFC RRA Decision, specifically the recovery of the NEFC RDDA, or the issue of cost causation.[154] Creative Energy adds that it did not consider any other alternative approaches to recover the NEFC RDDA balance under a standalone approach. The two recovery mechanisms evaluated are namely: (1) through a NEFC System Contribution Charge to NEFC building customers only under the Proposed Rate Design; and (2) through a levelized fixed charge tied to cost causation under the Standalone Redesign.[155]

Positions of the Parties

Interveners take no position on the alternative NEFC rate designs considered.

Panel Discussion

Typically, rate design applications include an evaluation of multiple feasible alternatives considered and the resulting impacts on customer rates. The Panel notes that apart from the Proposed Rate Design, the Standalone Redesign for NEFC was the only comprehensive alternative provided by Creative Energy. Although other alternative standalone NEFC rate designs were identified but not evaluated by Creative Energy, the Panel

[148] BCUC Order G-104-21.

[149] BCUC Order G-11-22.

[150] Rates from the updated Rate Structure Model filed as an attachment to Creative Energy's response to BCUC IR 56.3 (Exhibit B-14). Refer to excel tab "NEFC standalone review" cells G41 and G42.

[151] Creative Energy provides a NEFC System Contribution Charge of $9.50/MWh in the summary table of rates in response to BCUC IR 56.3 (Exhibit B-14), however in the Rate Structure Model filed as an attachment to Creative Energy's response to BCUC IR 56.3 (Exhibit B-14, BCUC IR 56.3, Attachment “Rate Structure Model – BCUC IR 56.3”, Tab “RDDA Recovery”, Cell C11), Creative Energy calculates an NEFC System Contribution Charge of $9.68/MWh.

[152] The Average $/MWh for NEFC is calculated by determining the annual revenues collected for each building customer through NEFC's fixed charge (floor area of each building multiplied by the fixed charge) and variable charge (annual load multiplied by the variable charge). These annual revenues are summed and divided by the forecast annual load of the NEFC system (19,566 MWh). Please refer to Exhibit B-14, BCUC IR 56.3 for additional details.

[153] Exhibit B-1, Section 4.2.4, p. 29; Exhibit B-14, BCUC IR 64.11.

[154] Exhibit B-14, BCUC IR 64.2.

[155] Exhibit B-14, BCUC IR 64.4 and 64.5.

accepts that these rate designs would not address the concerns raised by the BCUC in the 2019–2020 Core and NEFC RRA Decision. Based on this, the Panel is satisfied with alternatives considered and evaluated by Creative Energy and accepts that the Standalone Redesign is the most appropriate alternative to address the concerns raised by the BCUC and to consider the merits of the Proposed Rate Design.

3.4 Alternative Rate Designs Considered for Core Steam

As discussed in Section 3.0, Creative Energy currently has a declining block rate structure and does not propose to change this rate structure at this time, noting that the Proposed Rate Design ensures the cost of the extension to serve the NEFC customers is fairly allocated and establishes a common foundation upon which new rate design supporting low-carbon service can be considered.[156] Notwithstanding this, Creative Energy does not consider that there is presently a cost basis for the existing declining block rate structure, nor does it support, at this time, any objectives apart from cost recovery, and adds that it is not claiming that this rate structure is appropriate for the long-term.[157]

On June 30, 2022, Creative Energy filed a CPCN application with the BCUC to electrify a portion of the base load steam generation of the Core Steam system and to thereby deliver low-carbon energy to support policy imperatives and achieve Creative Energy's desire and obligation to meet the expectations and requirements of their customers now and into the future (Decarbonization Project).[158] By Order C-5-22 dated September 15, 2022, the BCUC granted the CPCN for the Decarbonization Project. In the accompanying decision, the BCUC included the following directive:[159]

> *The Panel directs Creative Energy to file a rate design application that addresses different customer's needs (for example, existing customers that opt in to a specific amount of low carbon energy, new customers that require a greater amount of low carbon energy to meet the LCES requirements established by the City of Vancouver, and customers that may opt out of any low carbon energy component to their service) by June 30, 2023. As part of that application, Creative Energy is also directed to consider the appropriateness of implementing rate transition or mitigation mechanism(s) to address the impact of the proposed rate design on customers.*

Positions of the Parties

Interveners did not make submissions on the alternative rate designs for the Core Steam system.

Panel Determination

The Panel notes that the existing declining block rate structure for the Core Steam system is a legacy rate design that is not necessarily supported or appropriate and agrees with Creative Energy that it should be re-evaluated as part of the anticipated rate design application supporting low-carbon energy.

As part of the anticipated rate design application supporting low-carbon energy service, and in addition to the BCUC directions included in the Decarbonization Project Decision, the Panel directs Creative Energy to provide

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[156] Exhibit B-11, BCUC IR 8.2 and 8.7; Exhibit B-14, BCUC IR 61.2.

[157] Exhibit B-11, BCUC IR 2.1 and 8.1.

[158] Creative Energy, Application for a CPCN Core Steam System Decarbonization Project (Decarbonization Project) proceeding, Exhibit B-1, Section 1.1, p. v.

[159] BCUC Order C-5-22 and accompanying decision, p. 45.

a comprehensive proposal that includes analysis of the pros and cons for both the ratepayers and the utility of each of the feasible alternatives considered. The Panel also expects that Creative Energy will engage and consult with stakeholders, and customers served by the Core Steam Plant on its future rate design application, including the feasible alternatives considered. As part of the engagement and consultation process, the Panel encourages Creative Energy to provide an opportunity for feedback and comments and to re-evaluate the proposal and alternatives, as appropriate, based on this feedback.

3.5 Consultation

In advance of filing the Application, Creative Energy sent a customer engagement letter in November 2021 to all Core Steam and NEFC customers, notifying them of the Proposed Rate Design, including the expected rate impacts, and sought feedback by December 8, 2021. In addition, Creative Energy attached Application Part One, as well as the BCUC order establishing a public written hearing process and a regulatory timetable for this proceeding (as discussed earlier in Section 1.4), to the customer engagement letter for further information.[160] Creative Energy stated that no comments were received in response to the November 2021 customer engagement letter.[161]

With respect to Application Part Two, Creative Energy confirmed that it informed all customers of that filing on December 6, 2021, and provided a copy to customers as well, as directed by the BCUC.[162]

Pursuant to direction by the Panel, Creative Energy undertook further engagement and consultation activities in May 2022 with all customers regarding the Application and the Evidentiary Update to provide an opportunity for customers to provide feedback and comments.[163] Creative Energy held a virtual information and engagement session, presenting the Proposed Rate Design and responding to any questions raised, as well as inviting customers to provide any written comments, irrespective of whether they participated in the virtual session or not. Creative Energy noted that three customer representatives taking service from the Core Steam system registered and participated in the engagement session, however, none of the four NEFC system customers registered to participate. Two of the three customer representatives were energy managers for institutional and federally controlled buildings and the third was an account manager of a commercial building.[164] Creative Energy states that at the engagement session, participants “indicated their satisfaction” with the information presented, no customer registered any concern with the Proposed Rate Design, and that two customers directly indicated favourable impressions overall. Creative Energy notes that no written comments or feedback were received after the engagement session from the participants or any other customer.[165]

Related to the next steps, if the consolidated cost of service and Unified Rates for the NEFC system and Core Steam system are approved, Creative Energy outlined that it would explain the approved rates, rate structure and expected rate impacts in a letter to customers.[166] Creative Energy also stated that it plans to engage with customers on a future rate design which supports low-carbon service for Core Steam and NEFC system

[160] Exhibit B-12, p. 10; Corrected Response to BCUC IR 9.1.
[161] Exhibit B-12, Corrected Response to BCUC IR 9.1 and 9.1.2.
[162] Exhibit B-5, p. 1; Exhibit B-17, pp. 1–2.
[163] Exhibit B-17, p. 2; BCUC Order G-115-22.
[164] Exhibit B-17, pp. 2–3.
[165] Exhibit B-17, p. 3.
[166] Exhibit B-12, Corrected Response to BCUC IR 9.3.

customers, pending the BCUC's final decision on the Decarbonization Project CPCN, which is addressed in Section 3.4 of this decision.[167]

Positions of the Parties

Interveners did not comment on Creative Energy's consultation with Core Steam or NEFC customers.

Panel Discussion

The Panel is satisfied with Creative Energy's consultation and engagement activities with its customers on the Proposed Rate Design. Creative Energy has made appropriate efforts to inform both the Core Steam and NEFC customers on the Proposed Rate Design and the resulting rate impacts, including providing opportunities for comment, questions, and feedback. The Panel notes that only three customer representatives, two of which were energy managers, from the Core Steam system participated in the engagement session, however, acknowledges that the consultation process does not necessitate a specified level of participation in the consultation and engagement activities.

3.6 Overall Panel Determination on Proposed Rate Design

Creative Energy submits that the Proposed Rate Design not only addresses the concerns raised by the BCUC in the 2019–2020 Core and NEFC RRA Decision but also corrects what it purports to be an unfair allocation of costs to serve the NEFC system and delivers significant other benefits to current and future customers, the utility and the BCUC.[168] Creative Energy considers that under the Proposed Rate Design, the price signal will be improved for customers and the new structure will offer a fair basis for customers to evaluate competitive alternatives for thermal energy service.[169] It notes that by correcting for the imbalance in existing cost allocation between the energy systems under the Proposed Rate Design, the distortion in rates will be removed for both existing customers and potential new customers that will evaluate whether to take service.[170] Furthermore, under the Proposed Rate Design, Creative Energy states that increased efficiency will be observed with the preparation and review of fewer and more stream-lined regulatory applications.[171] It adds that there will be significant regulatory complexity as Creative Energy seeks a new rate design supporting low-carbon service for all customers served by the Core Steam Plant and considers that the Proposed Rate Design establishes a solid basis to proceed. [172]

Creative Energy evaluated the Proposed Rate Design, Existing Rate Design and Standalone Redesign against the Bonbright criteria and considers its proposal to consolidate the Core and NEFC cost of service and unify the rates is overwhelmingly superior to the alternatives.[173]

It adds that the Proposed Rate Design is a foundation to move forward with an application for approval of a new rate design that supports low-carbon service available to all customers served by the Core Steam Plant (i.e. the

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[167] Exhibit B-11, BCUC IR 8.1.
[168] Exhibit B-1, Section, 2.2.2, pp. 9–10; Section 5.1, pp. 30–31; Exhibit B-11, BCUC IR 4.1.
[169] Exhibit B-11, BCUC IR 4.1.
[170] Exhibit B-10, The CEC IR 1.10.
[171] Exhibit B-11, BCUC IR 4.2.
[172] Exhibit B-1, The CEC IR 1.3 and 1.10; Exhibit B-11, BCUC IR 4.1.
[173] Exhibit B-1, Section 5.4.1, pp. 35–38; Exhibit B-11, BCUC IR 10.2.1.

Core Steam customers and the NEFC customers). Creative Energy does not consider that the legacy declining block rate structure supports any objectives at this time, apart from cost recovery.[174] Creative Energy notes that the merits of its proposal and benefits to the customers are established through the consolidation of the revenue requirements and notes that the unification of rates is independent of the declining block rate structure.[175]

Positions of the Parties

RCIA agrees with Creative Energy's submission that the Existing Rate Design is unfair to the NEFC customers given they effectively "subsidize" the Core Steam rates. However, RCIA does not agree that the onus to absorb the entire capital costs of the NEFC extension should rest exclusively with either the NEFC customers or the combined group of Core Steam and NEFC customers, and considers that the ultimate responsibility for any unrecoverable NEFC extension capital costs rests with Creative Energy's shareholders.[176]

The CEC recommends that the Proposed Rate Design be denied on the basis that: (i) it "will result in an unacceptable rate increase" to the Core Steam customers; (ii) the NEFC system was approved as a separate TES rather than an extension of the Core Steam system; and (iii) NEFC has "a separate and distinct customer base" with different cost structures as compared to the Core Steam system, "appropriately resulting in a separate tariff."[177]

The CEC also notes that during the 2015 NEFC CPCN proceeding, several less costly options to a district energy system were identified by interveners, and due to the nature of the application as a district energy system, and not a system extension, the BCUC did not address or make any determinations on the alternatives given the nature of that application.[178]

The CEC submits that it is necessary for the BCUC to consider the public interest in the future of the Core Steam system when making its determinations, as well as the immediate impact on the Core Steam customers who have high costs and limited opportunities to extricate themselves from their utility after the fact.[179]

In reply, Creative Energy states that it is not correct to assume that the Proposed Rate Design is structured to or would "bail out" Creative Energy in relation to some unexplained risk associated with the capacity of the NEFC system. It adds that the proposal does not present a financial risk to Creative Energy, nor does it benefit Creative Energy's shareholders. Rather, the Proposed Rate Design rebalances the costs such that they are fairly allocated between the Core Steam system and the NEFC system.[180]

Creative Energy re-iterates that under the Existing Rate Design there is an imbalance in the cost allocation between the Core Steam and NEFC systems.[181] The imbalance arises because the rates for the Core Steam

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[174] Exhibit B-11, BCUC IR 2.1 and 2.2.
[175] Exhibit B-11, BCUC IR 8.1.
[176] RCIA Final Argument, section 2.1.2, p. 7.
[177] The CEC Final Argument, section I, para. 1, p. 1.
[178] The CEC Final Argument, Section IV, para. 51–54, pp. 9–10.
[179] The CEC Final Argument, section I, para. 87, p. 15.
[180] Creative Energy Reply, section 2.2, para. 9, pp. 2–3; section 5, para. 16, p. 9.
[181] Creative Energy Reply, section 2.2, para. 9, p. 3.

system are set such that they include the load forecast of the NEFC system while not factoring in the cost of the system extension to serve the NEFC customers.[182] Creative Energy notes that given the changes in circumstances where the NEFC system will not transition to become functionally separate from the Core Steam system, it is not reasonable to perpetuate the cost imbalance that occurs under the Existing Rate Design.[183]

Creative Energy notes that the cause of the imbalance and the intent and outcomes of the Proposed Rate Design have been misconstrued and submits that:[184]

- The BCUC acknowledged in the 2019–2020 Core and NEFC RRA Decision that the current NEFC rates may not be sufficient to recover the capital costs of the system given slower than expected load growth and directed Creative Energy to file a comprehensive rate design proposal for NEFC.
- There is no reason to assume there will not be future load growth on the NEFC system.

In reply to the CEC's concern with respect to the rate increase the Core Steam customers will experience under the Proposed Rate Design, Creative Energy notes that these concerns can be mitigated through a rate-smoothing mechanism. However, Creative Energy considers the impacts to be small and does not believe such a measure is warranted.[185]

Creative Energy submits that in addition to fairly rebalancing the allocation of costs between the energy systems, the Proposed Rate Design will (i) provide a suitable foundation for considering a low-carbon service for all customers served by the Core Steam system, including the Decarbonization Project; and (ii) mitigate any incentive for future customers choosing to connect to the Core Steam system, thereby bypassing the "unfair penalty" that would be incurred to connect through the NEFC system.[186] Creative Energy notes that interveners do not take issue with or comment on Creative Energy's assessment of these and other noted benefits of the Proposed Rate Design, including its assessment of the Bonbright criteria.[187] Creative Energy adds that all building customers now and in the future that receive conventional or low-carbon thermal energy produced by the Core Steam system will share in these benefits.[188]

Panel Determination

As noted above in Section 3.1 of this decision, **the Panel approves Creative Energy's proposal to consolidate the costs of service and unify the rate base and rates for the NEFC system with the Core Steam system.** Furthermore, the Panel approved the System Contribution Charge for NEFC as an integral component of the consolidated rate design. The Panel provides its reasons for its overall conclusion on the Proposed Rate Design below in this section. Specifically, the Panel considers the BCUC concerns raised in the 2019–2020 Core and NEFC Decision, the basis on which rates for the Core Steam and NEFC system would be set, the merits of the Proposed Rate Design as compared to alternatives, and the overall benefits of the Proposed Rate Design.

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[182] Creative Energy Reply, section 2.2, para. 9, p. 4.
[183] Creative Energy Reply, section 2.2, para. 9, pp. 3, 4.
[184] Creative Energy Reply, section 2.3, para. 10, pp. 5–7; section 2.4, paragraph 12, pp. 7–8.
[185] Creative Energy Reply, section 2.4, para. 12, pp. 7–8.
[186] Creative Energy Reply, Section 2.2, para. 9, p. 4.
[187] Creative Energy Reply, Section 2.4, para. 11–12, pp. 7, 8, 9; Section 5, paragraph 17, pp. 9–11.
[188] Creative Energy Reply, Section 5, para. 18, p. 10.

The Panel acknowledges that Creative Energy has satisfied the direction pursuant to the 2019–2020 Core and NEFC RRA Decision[189] to file a comprehensive proposal for NEFC rate design and for setting 2022 rates and considers that the BCUC's concerns with respect to the NEFC's levelized rates and recovery mechanism for the NEFC RDDA have all been addressed by the Proposed Rate Design.

As noted in Section 3.2, the Panel has concluded that it is appropriate to treat the Core Steam and NEFC systems as one class of service for the purposes of setting rates, noting that the medium used to provide the thermal energy to end-use customers does not sufficiently constitute that the two interconnected energy systems should be considered separate classes of services. Further, the Panel approved the System Contribution Charge above in Section 4.1. The Panel considers that the System Contribution Charge addresses any differences in the cost to serve customers connected to the Core Steam and NEFC systems. In the Panel's view, under the Proposed Rate Design, the recovery of costs by the Core Steam and NEFC customers is tied to cost causation and the timing of the cost recovery coincides with the benefits being received by customers. The System Contribution Charge, which is a component of the Proposed Rate Design and applied to NEFC customers only, is also tied to the cost causation principle, whereby it recovers those costs that are attributable solely to the NEFC system and is adjusted as future customers connect to the system. Accordingly, the Panel considers that the rates charged to the Core Steam and NEFC customers under the Proposed Rate Design are not unjust, unreasonable, unduly discriminatory or unduly preferential.

The Panel considers that Creative Energy's Proposed Rate Design delivers several benefits to current and future customers of both the Core Steam and NEFC systems. Under the Proposed Rate Design, customers will have rates that are simple and readily understood. It follows cost causation principles and promotes predictable and stable recovery of the cost to serve the Core Steam and NEFC customers. The Panel anticipates regulatory and administrative efficiencies will be experienced by both Creative Energy and the BCUC under the Proposed Rate Design. Further, Creative Energy sought feedback on the Proposed Rate Design through various consultation and engagement activities as described in Section 3.5, and participants and customers did not register any concerns with the Proposed Rate Design.

Additionally, the Panel considers that the Proposed Rate Design will offer a consistent basis for customers across the unified rate base to evaluate competitive alternatives for thermal energy service. The Panel notes that, as discussed in Section 3.4, the existing declining block rate structure that is used in the Proposed Rate Design is not appropriately supported, however, the Proposed Rate Design will form a reasonable and appropriate starting point for a new rate design to support low-carbon energy service for all customers served by the Core Steam Plant and the Decarbonization Project.

Creative Energy submits that under the Existing Rate Design, rates for the Core Steam and NEFC systems did not fairly recover the cost to serve each energy system, however, the Panel does not share this view. Specifically, Creative Energy asserts that the existing rates are based on an "unfair allocation of costs between the Core Steam and NEFC system" and also submits that "[p]ursuant to the initial NEFC rate design, customers connected to the NEFC system provide (and continue to provide) an inherent subsidy to Core Steam system rates."[190] The Panel notes, the rates that have been in place for both the Core Steam and NEFC systems have been previously approved by the BCUC, and no evidence has been provided to demonstrate that the previous rates were unjust,

[189] 2019–2020 Core and NEFC RRA decision accompanying BCUC Order G-227-20, p. 50.
[190] Creative Energy Final Argument, Section 2.1, para. 52. p. 10.

unreasonable, unduly discriminatory or unduly preferential. Furthermore, the reasons for approving the Proposed Rate Design noted above are indifferent to the previous cost allocation.

The Panel disagrees with the CEC's submission that the Proposed Rate Design "will result in an unacceptable rate increase" to the Core Steam customers or that the NEFC "has a separate and distinct customer base" with different cost structures. Creative Energy has appropriately based its Proposed Rate Design and the resulting rates on the principles of cost causality such that the NEFC and Core Steam customers are responsible for the respective costs to serve each energy system. The Panel does not consider that establishing separate customer classes with distinct cost structures is required under the Proposed Rate Design.

The Panel has considered the merits of the Proposed Rate Design as compared to the Standalone Redesign, discussed in Section 3.3, given that it was structured to also address the BCUC's concerns raised in the 2019–2020 Core and NEFC Decision. The Panel considers that there are several advantages to the Proposed Rate Design over the Standalone Redesign, including:

- Full recovery of all revenue requirement components with fewer deferral mechanisms, supporting simplicity and regulatory efficiency;
- Rates that are practical and provide a less significant rate impact, specifically for the NEFC building customers;
- Reduced risks of rate volatility for NEFC customers with their smaller rate base due to factors beyond Creative Energy's control;
- Opportunity to share costs and benefits of the Decarbonization Project Decision for the Core Steam and NEFC systems by having the same rate design of the consolidated system;
- The use of an existing approved rate structure for NEFC customers, as opposed to a new rate structure under the Standalone Redesign, which may have additional administrative and regulatory costs to implement; and
- Reduced complexity of future revenue requirement proceedings which supports regulatory efficiency, given that going forward under the Proposed Rate Design, the revenue requirements can be presented on a consolidated basis, whereas under the Standalone Redesign there would be two separate revenue requirements recovered through two unique rate designs.

The Panel considers that the Proposed Rate Design provides compelling benefits when compared against the Standalone Redesign, and that the Proposed Rate Design would also provide benefits with respect to future system expansions.

The Panel acknowledges the concerns raised by the CEC with respect to the NEFC system being approved as a separate TES and the evaluation of the alternatives in the 2015 NEFC CPCN. However, the Panel notes that at the time of the 2015 NEFC CPCN proceeding, the NEFC system was expected to transition to become part of a functionally separate low-carbon energy system. Circumstances have changed for Creative Energy since that time, and it is the Panel's view that Creative Energy has provided alternatives to best address the current situation and concerns raised by the BCUC on a go-forward basis.

The Panel addresses the implementation date of the Proposed Rate Design in Section 6.0 of this decision, following review of the load forecast and revenue requirements of the Core Steam and NEFC systems on a standalone basis.

4.0 2022 Load Forecast and Revenue Requirement for the Core Steam System

The Panel considers it appropriate to review the 2022 load forecast and the 2022 forecast revenue requirements for each the Core Steam and NEFC systems separately and to subsequently consider the rate impacts under the Existing Rate Design and Proposed Rate Design as part of the decision on whether the Proposed Rate Design should be implemented, effective January 1, 2022 or 2023.

In this section, the Panel reviews Creative Energy's 2022 load forecast and proposed revenue requirements for the Core Steam system, including capital additions and deferral accounts on a standalone basis. In Section 5.0, the NEFC system is reviewed on a standalone basis and in Section 6.0, the Panel considers the effective date for Creative Energy's proposal to consolidate the revenue requirements of the Core Steam and NEFC systems to unify rates.

4.1 Load Forecast

In the Application, Creative Energy sought approval of a 2022 steam load forecast of 972,400 M# for the Core Steam system. Creative Energy amended its 2022 steam load forecast in the Evidentiary Update filing to 1,144,000 M#. The 2022 amended annual steam load forecast reflects an increase of 17.6 percent from the annual load forecast of 972,400 M# that was based on an approved 2021 load forecast of 971,259 M# and further load additions of 1,141[191] M# from two new customer connections.[192]

Based on a review of actual weather-normalized load from October 2021 to March 2022, Creative Energy submits a 17.6 percent increase to the load forecast to reflect return of load to pre-pandemic levels. Creative Energy considers the 17.6 percent increase in the 2022 Core Steam load as an equivalent offset to the 15 percent reduction incorporated in the approved 2021 forecast load.[193]

Creative Energy's Core Steam system supplies thermal energy to the NEFC system, and therefore, the Core Steam load consists of the load to serve both Core and NEFC customers. The 2022 load forecast for the Core Steam system as filed in both the Application and Evidentiary Update is included in the table below:[194]

Table 10: 2022 Load Forecast for the Core Steam System

	Application (M#)	15% Increase (M#)[195]	Amended Load Forecast (M#)

[191] Creative Energy Final Argument, p. 7.
[192] Exhibit B-1-1, Section 1.2, p. 5.
[193] Creative Energy Final Argument, p. 18.
[194] Exhibit B-12, p. 4.
[195] Creative Energy states the Amended Load Forecast is a 15 percent increase over that provided in the Application, however, notes in response to IRs (Exhibit B-14, BCUC IR 71.1) that the increase reverses the 15 percent reduction in the 2021 load forecast due to the

Core	912,637	161,054	1,073,691
NEFC	59,763	10,546	70,309
Total	972,400	171,600	1,144,000

Creative Energy provides the most recent three-year approved, actual, and weather-normalized load data for its Core Steam system in the table below.[196]

Table 11: 2019, 2020 and 2021 Weather Normalized Load Forecast for the Core Steam System

Core Steam System Load (M#)	2019	2020	2021
Approved	1,098,514	1,140,634	971,259
Actual	1,122,361	1,035,173	1,097,875
Weather Normal Actual	1,049,780	1,017,050	1,013,607

Creative Energy notes that the BCUC approved the creation of the COVID-19 Deferral Account in 2020 and that in the 2021 Core RRA Decision, the deferral account was approved to capture the variance between the 2021 approved steam load forecast and the actual 2021 steam load.[197] Creative Energy submits that while the impact of the pandemic on load may still be uncertain going forward, the COVID-19 Deferral Account will continue to function as a load variance deferral account under the Proposed Rate Design.[198]

Creative Energy explains that steam loads are the essential billing determinants for Core Steam system rate setting since all costs are recovered through the volume of steam sold to customers. In addition to its use in determining the rates for the 2022 Test Year, the steam load forecast is used for other ratemaking purposes, for example, forecasting the water and electricity costs for the Core Steam system.[199]

Positions of the Parties

No intervener submissions were filed on this matter.

Panel Discussion

Creative Energy proposes a 2022 load forecast in keeping with previous BCUC directives by incorporating weather normalization, and by obtaining information from significant customers regarding any pertinent changes to their building or operations that could impact demand. Creative Energy has further adjusted the load forecast to reflect the moderation of the impact of the COVID-19 pandemic. The Panel accepts this approach to the load forecast methodology for Core Steam customers, which includes the thermal energy load of NEFC customers, to be reasonable and appropriate and considers the 2022 Amended Load Forecast of 1,144,000 M# for the Core Steam system is reasonable for the purposes of setting rates.

impact of the COVID-19 pandemic that was approved in the 2021 Core RRA decision. As a result, the calculated increase of the Amended Load Forecast is over the load forecast presented in the Application, which is based on the 2021 BCUC approved forecast, is 17.6 percent.

[196] Exhibit B-11, BCUC IR 22.2.

[197] BCUC Order G-214-20; 2021 Core RRA decision, Section 2.4, p. 44.

[198] BCUC Order G-214-20 dated August 14, 2020, Directive 1(ii)(c).

[199] Exhibit B-12, p. 2.

4.2 Revenue Requirement

The Panel must assess if the forecast revenue requirement for the Core Steam system appropriately reflects the total amount of revenue that would be collected in rates for Creative Energy to recover its forecast costs of service and to provide it an opportunity to earn a reasonable return.

Creative Energy's 2022 forecast revenue requirement of approximately $10.39 million for the Core Steam system is set out in Table 12, below:

Table 12 – 2022 Forecast Revenue Requirement for the Core Steam system

Component	2021 Approved[200]	2022 Forecast[201]
Operation and Maintenance Expenses		
Wages and Benefits	3,361,878	3,619,436
Water-Related and Electricity Expenses	929,937	1,067,778
Maintenance (including parts, supplies, safety and vehicles)	535,862	553,132
Special Services (Regulatory, Audit, third-party consultants)	298,966	339,792
Other General & Administration, Sales Exp (e.g. insurance, office including IT expenses)	312,998	455,493
Municipal Access Fees or Taxes	287,137	299,847
Non-Operating and Other		
Property Taxes	729,600	821,265
Income Taxes	294,500	255,800
Depreciation (including amortization of CIAC)	967,090	996,940
Cost of Debt	617,000	719,000
Return on Equity[202]	1,080,000	1,120,000
Amortization of Deferral Accounts	84,964	138,074
Total Revenue Requirement	**9,499,932**	**10,386,558**

Creative Energy forecasts an increase in its 2022 revenue requirement of approximately $887K, or nine percent, compared to the 2021 approved amount.[203] The increase is primarily driven by: (i) higher wages and benefits

[200] Exhibit B-1-1, Section 1, p. 3; Exhibit B-12, Updated Core 2022 RRA Schedules – Separate.

[201] Exhibit B-1-1, Section 1 p. 3; Section 2.1.4, p. 12; Exhibit B-2, Core 2022 RRA Schedules - Separate; Exhibit B-12, p. 3, Updated Core 2022 RRA Schedules – Separate.

[202] Creative Energy calculates its return on equity based on a mid-year rate base figure ($27,737,953 (Exhibit B-12, Attachment "Updated 2022 Core RRA Schedules – Separate", worksheet "Sch13 Cost of Capital", Excel cell H7)), a deemed capital structure that is 42.50 percent equity (in accordance with the decision accompanying BCUC Order G-47-14 (p. 132)), and a return on equity of 9.50 percent (in accordance with the BCUC's decision on Creative Energy's 2015–2017 RRA accompanying BCUC Order G-98-15 (p. 8)).

[203] BCUC calculated amount: $10,386,558 - $9,499,932 = $886,626; $886,626/$9,499,932=9.33 percent.

due to inflation; (ii) increasing overtime costs; (iii) an increase in staff to maintain safe and reliable service; and (iv) upgrading information technology (IT) support and systems.[204]

Positions of the Parties

The CEC does not take issue with the 2022 revenue requirements for the Core Steam system and "recommends that the Commission accept the cost components provided by Creative Energy for the purposes of rate setting."[205] The RCIA makes no final submissions on the cost-of-service components and "defers to other interveners who may wish to take issue with any of these other cost-of-service items."[206]

Panel Determination

The Panel finds the 2022 forecast revenue requirements for the Core Steam system to be reasonable for the purposes of setting rates in the 2022 Test Year, subject to the directives and determinations on the items addressed in the subsections below.

In the followings subsections, the Panel reviews issues arising with respect to the 2022 revenue requirements for the Core Steam system, specifically water and electricity costs, IT, outside services, property taxes, and cost of debt. The Panel also addresses Creative Energy's proposals relating to the allocation of O&M costs using the Massachusetts Formula, including allocations for overtime costs and capitalization of plant costs in the respective subsections.

4.2.1 Water and Electricity Costs

Water and electricity costs are forecast based on the forecast load for the Core Steam system.[207] Based on a review of actual load over the period of October 2021 to March 2022, Creative Energy submits that load is returning to pre-pandemic levels and therefore, considers it reasonable to reverse the 15 percent reduction in the 2021 load forecast due to the impact of the COVID-19 pandemic that was approved in the 2021 Core RRA Decision.[208] Based on this, Creative Energy's 2022 forecast revenue requirement for water and electricity costs, as amended by the Evidentiary Update, for the Core Steam system is set out in Table 13. Included in Table 13 are water treatment costs which also vary with load, but the relationship is not as direct as water costs.[209]

Table 13 – 2022 Forecast Revenue Requirement Water and Electricity Costs for the Core Steam system

Water and Electricity Costs	2021 Approved[210]	2022 Forecast[211]
Water Costs	750,857	834,928
Water Treatment Costs	139,937	91,402

[204] Exhibit B-1-1, Section 2.1.5, p. 14, 15, 16; Section 2.1.9, p. 22.
[205] The CEC Final Argument, Section V, and Conclusion para. 125.
[206] RCIA Final Argument, Section 2.2.
[207] Exhibit B-12, pp. 4–5.
[208] Exhibit B-12, p. 4; Exhibit B-14, BCUC IR 71.1; 2021 Core RRA decision, Section 2.1.3, p. 13.
[209] Exhibit B-1-1, Section 2.1.6, p. 18.
[210] Exhibit B-1-1, Section 2.1.6, p. 17.
[211] Exhibit B-1-1, Section 2.1.6, p. 17; Exhibit B-12, p. 5.

Electricity Costs	94,036	118,665

The forecast methodology and rationale for the variance for each of the costs is discussed below.

Water

Creative Energy's primary water usage consists of feed water as an input in steam production and water cooling applied to condensate within the Core Steam Plant so that it can safely be discharged into the City of Vancouver's storm and sewer network.[212] The City of Vancouver charges Creative Energy water and sewer fees, and although the rates are externally set and outside Creative Energy's control, the volumes closely correlate with steam load.[213] Given the direct relationship between the water input and steam produced, Creative Energy's methodology to forecast water costs is based on the ratio of historic actual water costs and steam load multiplied by forecast steam load. [214] The percentage increase in the 2022 water costs over the 2021 approved water costs approximates the increase in load for the Core Steam system.

Creative Energy seeks BCUC approval of a water cost deferral account for 2022. We discuss Creative Energy's proposal for variance treatment of water costs in Subsection 4.4.1.

Water Treatment

The 2022 forecast water treatment costs are calculated using a three-year weighted average of actual costs, over the period of 2019 to 2022, adjusted for inflation. Creative Energy states that the "most fair and reasonable approach for estimating the cost continues to be the use of an average of historical costs."[215] In response to IRs, Creative Energy stated that there is no quantifiable relationship between water costs and water treatment costs and that it does not find any evidence in its historical numbers for calculations.[216] Creative Energy further notes that it installed a chemical feedwater system that began operating in 2021 that doses chemistry based on steam production. Creative Energy will continue to monitor the system to understand whether there is any correlation to load.[217]

Electricity

Creative Energy takes electricity service from British Columbia Hydro and Power Authority (BC Hydro) under Large General Service Rate Schedule 1611. Forecast electricity costs for the 2022 Test Year are calculated using the forecast load and the BC Hydro rates in effect at the time that forecast costs are determined. The 2022 forecast electricity costs use an estimate of historical peak demand by month to forecast demand charges and an estimate of the ratio of electricity consumption to steam production to forecast energy charges.[218] The increase in the 2022 forecast electricity costs over the 2021 Approved costs is primarily due to the increase in load for the Core Steam system as discussed in Section 4.1.[219]

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[212] Exhibit B-1-1, Section 2.1.6, p. 17.
[213] Exhibit B-1-1, Section 2.1.6.1, p. 18; Section, p. 36; Exhibit B-11, BCUC IR 34.5.
[214] Exhibit B-1-1, Section 2.1.6, p. 17.
[215] Exhibit B-11, BCUC IR 34.3; Exhibit B-14, BCUC IR 81.3.
[216] Exhibit B-14, BCUC IR 76.1.
[217] Exhibit B-14, BCUC IR 81.3.
[218] Exhibit B-1-1, Section 2.1.6, p. 19.
[219] Exhibit B-12, p. 5; Exhibit B-14, BCUC IR 75.1.

Positions of the Parties

Interveners did not file submissions on this matter.

Panel Determination

The Panel finds the forecast water and electricity costs as amended in the Evidentiary Update provide a reasonable basis for determining the 2022 revenue requirement for the Core Steam system. The Panel considers it appropriate for Creative Energy's water and electricity costs to approximate the expected increase in the load forecast based on the observed moderation of the impact of the COVID-19 pandemic.

With respect to water treatment costs, the Panel acknowledges that these costs vary with load, but the relationship is not direct and appreciates that Creative Energy is continuing to monitor the system to understand the correlation. **The Panel directs Creative Energy to include in its next RRA, a review of its methodology for forecasting water treatment costs which includes a summary of the monitoring data collected and a discussion of how the data informs the forecast methodology.**

4.2.2 Information and Technology

Creative Energy allocates its IT costs between its regulated and non-regulated business operations on a headcount basis, and the IT costs for its regulated operations are further apportioned to each of the regulated energy systems using the Massachusetts Formula.[220]

In the 2022 revenue requirements, Creative Energy proposes to increase its forecast IT costs to upgrade the systems. Further, Creative Energy proposes to reduce the allocation of IT costs to regulated operations from 75 percent to 64 percent. These proposals apply to the 2022 revenue requirements for both the Core Steam and the NEFC systems, and for efficiency, both are addressed below in this section.

Creative Energy states that it is significantly upgrading its IT support and systems in 2022 as its current managed service provider could no longer provide the level of support required.[221] Specifically, Creative Energy noted several issues with the previous service provider, including: inadequate service levels; inability to support growth and process improvement; and lack of cybersecurity protections. Creative Energy considered two new managed service providers, Ricoh Canada and IT Weapons, and evaluated each on several attributes, including: service levels; system security; capability to provide strategic IT advice and support; and cost. Creative Energy notes that the costs, support levels, and competencies were similar, however Ricoh Canada proved to be a more collaborative partner for Creative Energy.[222]

Creative Energy transitioned to Ricoh Canada in the first quarter of 2022.[223] This transition impacts both annual IT costs and one-time transition IT costs in 2022. The breakdown of these IT costs for the Core Steam system and NEFC system is provided in the following table: [224]

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[220] Exhibit B-12, Table 9, p. 6.
[221] Exhibit B-1-1, Section 2.1.9, p. 22.
[222] Exhibit B-11, BCUC IR 38.6.
[223] Exhibit B-12, p. 6.
[224] Exhibit B-12, p. 6.

Table 14: Summary of 2022 IT Upgrade Costs for the Core Steam and NEFC System[225]

	Core Steam System	NEFC System
One-Time Transition Costs	54,570	5,166
Recurring Costs	103,823	9,921
Total	**$158,393**	**$15,087**

In addition to the proposed increase in IT costs for the change in the managed service provider, Creative Energy proposes to increase the allocation of IT costs to non-regulated operations. Creative Energy states that it allocates its IT costs on a headcount basis to its regulated and non-regulated operations, and this has previously resulted in 75 percent of IT costs being allocated to regulated operations and 25 percent to non-regulated operations.[226] Creative Energy proposes to change the percentage allocation of IT costs to 64 percent being allocated to regulated operations and 36 percent to non-regulated operations, effective January 1, 2022, because the headcount for the non-regulated operations has grown.[227] Creative Energy submits that headcount continues to be a reasonable methodology for allocating IT costs between Creative Energy's regulated and non-regulated operations, noting that IT costs typically grow over the long-term with the number of users, given users typically drive the number of support requests and licenses needed.[228] The proposed change in the percentage allocation of IT costs reduces the total 2022 forecast IT costs for the Core Steam and NEFC system to $135,162 and $12,879, respectively.[229]

Positions of the Parties

The CEC agrees with Creative Energy that increasing the historical IT allocation to non-regulated operations from 25 percent to 36 percent would be appropriate considering the growth of the non-regulated operations.[230] The CEC is also satisfied with the increase in IT costs as adjusted to reflect the revised allocation.[231] RCIA did not comment on this matter.

Panel Determination

The Panel approves Creative Energy's proposal to revise the percentage allocation of IT costs between the regulated and non-regulated operations to 64 percent and 36 percent, respectively, to reflect the current distribution of headcount. Further, the Panel finds that the resulting 2022 forecast IT costs for the system upgrades are reasonable, subject to the directives and determinations in this decision, specifically related to the Massachusetts's Formula.

The Panel has reviewed the evidence related to the IT costs for upgrading the support and systems, including the proposed change to the allocation of IT costs between regulated and non-regulated operations. The Panel notes that the new managed service provider will address limitations Creative Energy experienced under its previous provider. Considering the need for the upgraded support and systems, and the alternative analysis put

[225] Exhibit B-12, Table 8, p. 6; The "One-time transition costs" were not noted to be incremental in Table 8 of Exhibit B-12 and accordingly BCUC staff summed the "Original IT cost estimate" and the "Incremental Recurring Cost" to arrive at the "Recurring Cost" as presented in the above table.
[226] Exhibit B-1-1, Section 2.1.9.1, p. 22; Exhibit B-14, BCUC IR 86.2.
[227] Exhibit B-11, BCUC IR 38.8.
[228] Exhibit B-14, BCUC IR 86.2
[229] Exhibit B-12, Table 9, p. 6.
[230] The CEC Final Argument, para. 110, p. 19.
[231] The CEC Final Argument, para. 112, p. 20.

forward by Creative Energy, the Panel is satisfied with the 2022 forecast IT costs. In addition, the Panel recognizes that these upgrades offer opportunities for better service levels, process improvements, and cybersecurity protections.

The Panel also acknowledges that the change in the allocation of IT costs has the impact of reducing the IT costs allocated to Creative Energy's regulated operations. The Panel considers that an allocation based on head count is reasonable, given that the number of users generally drive IT-support costs. The Panel is satisfied with Creative Energy's proposal to reduce the allocation of IT costs to regulated operations from 75 percent to 64 percent, effective January 1, 2022.

4.2.3 Steam Production Supervision and Labour Benefits

Creative Energy forecasts 2022 benefits costs for its Steam Production Supervision and Labour at $139,555. Benefits are estimated using projected rates for cost categories, including Canada Pension Plan (CPP); Employment Insurance (EI); WorkSafeBC; BC Employer Health Tax (EHT); and extended health.[232] Creative Energy explains that for extended health, an average estimate of $502 per month was used per employee, which it notes may have been conservatively high in retrospect, as the actual average was $373 for January 2022.[233] The impact of this difference on the revenue requirement for the Core Steam system is approximately $10,500 or $0.01/M#, had the estimate been closer to actual estimate of $373.[234] Creative Energy states that it is open to updating the 2022 forecast extended health costs.[235]

Positions of the Parties

Interveners did not file submissions on this matter.

Panel Determination

The Panel acknowledges that the 2022 forecast cost of the extended health benefits is calculated using an average estimate of $502 per month per employee, which is higher than the actual January 2022 costs of $373 per month per employee. The Panel considers that the actual January 2022 costs per employee reflects a reliable estimate of the costs for each month in fiscal 2022 2022. **The Panel directs Creative Energy to re-calculate the 2022 forecast cost of the extended health benefits using the actual monthly average of $373 per month per employee in a compliance filing due to the BCUC within 45 days of the date of this decision.**

4.2.4 Outside Services

Outside services (Outside Services) have historically related to consulting costs for government advisory services, reviewing customer and business development opportunities, and funding sources and external costs for preparing the tax return.[236] As part of the 2022 revenue requirements, Creative Energy proposes to correct a misallocation in the forecast costs for Outside Services. This proposed correction applies to the 2022 revenue

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[232] Exhibit B-1-1, Section 2.1.5.2, pp. 13–14.
[233] Exhibit B-11, BCUC IR 31.5.
[234] Exhibit B-14, BCUC IR 78.2.
[235] Exhibit B-14, BCUC IR 78.2.2.
[236] Exhibit B-1-1, Section 2.1.8.3, p. 21.

requirements for both the Core Steam and the NEFC systems, and for efficiency, both are addressed below in this section.

Creative Energy forecasts 2022 Outside Services costs for the Core Steam system to be $86,030. The forecast is calculated using the most recent three-year weighted average, adjusted for inflation to arrive at a base estimate (i.e. 20 percent, 40 percent and 40 percent for 2019, 2020 and 2021 respectively, plus 2 percent inflation).[237] The annual costs were normalized to remove cost components that were not expected to re-occur in 2022, and an additional $30,000 was added to the 2022 forecast base estimate for external assessments of customer connection opportunities.[238] Creative Energy clarifies that this additional $30,000 amount relates only to the Core Steam system and was incorrectly allocated via the Massachusetts Formula in the Application. Creative Energy proposes to correct this misallocation, stating that it could be corrected through a compliance filing. The revenue requirement impact for each of the Core Steam and NEFC systems individually is an increase of $7,710 and a decrease of $2,130, respectively. Under the Proposed Rate Design, the net revenue requirement impact would be an increase of $5,580 or $.004/M#.[239]

Positions of the Parties

Interveners did not file submissions on this matter.

Panel Determination

The Panel acknowledges that the 2022 forecast Outside Services costs for customer connections were incorrectly allocated via the Massachusetts Formula, and Creative Energy proposes to correct the error through a compliance filing. **The Panel directs Creative Energy to correct the misallocation of the $30,000 for external assessments of customer connection opportunities in a compliance filing to the BCUC within 45 days of the date of this decision.**

4.2.5 Massachusetts Formula

In the 2019–2020 Core and NEFC RRA Decision, the BCUC approved the use of a three-factor Massachusetts Formula methodology for Creative Energy to allocate general and administrative O&M costs not directly assigned between the Core Steam system, NEFC system and Creative Energy's other regulated TES projects based on the following factors: (i) the average gross book value of capital assets or property; plant and equipment; (ii) salaries or direct labour expenses; and (iii) operating revenues. [240]

In the 2021 Core RRA Decision on Inter-Affiliate Conduct and Transfer Pricing Policy, Creative Energy was directed to provide its total gross forecast general and administrative O&M costs as part of future RRAs to provide greater transparency of the cost sharing and the cost allocation methodology employed by Creative Energy.[241] In response to IRs, Creative Energy provided the directly assigned costs and the costs allocated via the Massachusetts Formula to each of Creative Energy's regulated TES affiliates broken down by account and business function.[242]

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[237] Exhibit B-1-1, Section 2.1.8.3, p. 21.

[238] Exhibit B-1-1, Section 2.1.8, pp. 20–21; Exhibit B-14, BCUC IR 84.1.

[239] Exhibit B-11, BCUC IR 37.5; Exhibit B-14, BCUC IR 84.1 and 84.1.1.

[240] 2019–2020 Core and NEFC RRA decision accompanying BCUC Order G-227-20, p. 25; Exhibit B-1-1, Section 2.1.1, p. 8.

[241] Exhibit B-11, BCUC IR 30.1.1; 2021 RRA for the Core Steam System accompanying BCUC Order G-349-21 issued November 30, 2021, Section 3.2, p. 18.

[242] Exhibit B-11, BCUC IR 30.1.1, "Attachment BCUC 30.1.1".

Creative Energy makes two proposals surrounding the allocation of general and administrative O&M costs not directly assigned to the regulated TES projects. It proposes to remove fuel costs from the operating revenues used to determine the allocation percentages for the Massachusetts Formula and it also proposes to allocate overtime costs using the Massachusetts Formula rather than directly allocating these costs solely to the Core Steam system. Each of these proposals is discussed below.

Operating Revenue Input of the Massachusetts Formula

Creative Energy proposes to remove fuel costs (e.g. natural gas and electricity costs which are typically passthrough costs) from the operating revenues input of the Massachusetts Formula to ensure costs are allocated fairly and operating revenues are comparable across all regulated energy systems. Creative Energy explains that this adjustment would ensure that the operating revenues will include only revenue related to the cost of service and not revenue related to fuel and electricity passthrough costs. [243]

On a standalone basis, the Core Steam and NEFC systems are allocated 74.3 percent and 7.1 percent of the 2022 general and administrative O&M costs that are not able to be directly assigned. Creative Energy explains that under the Proposed Rate Design, the cost allocation ratios for the Core Steam and NEFC systems would be the sum of the respective ratios, for a total allocation of 81.4 percent.[244]

Under the Proposed Rate Design, the fuel costs charged to NEFC customers would not change. However, the NEFC customers would be charged directly from the Core Steam system via the FCAC rather than have the fuel costs included as part of the revenue requirement. Creative Energy states that when allocating the general and administrative O&M costs not directly assigned using the Massachusetts Formula, it has historically used the revenue requirement for Core Steam system as the operating revenue input, which does not include the estimated FCAC. Creative Energy has used this same approach for the operating revenue input for the NEFC system, however, the NEFC's revenue requirement includes the cost of fuel. As a result, when calculating the revenue requirement for the Core Steam system under the Proposed Rate Design, it will be lower by the cost of fuel for the NEFC system than if the standalone revenue requirements for the Core Steam and NEFC systems are simply added together. Creative Energy clarifies that this does not mean that the full revenue requirement for the NEFC system is not billed to its customers, but rather the fuel costs of the revenue requirement are billed through the FCAC mechanism, which is outside the revenue requirements. Creative Energy summarizes that this change in the process to determining the revenue input for the Massachusetts Formula would change the general and administrative O&M costs allocated to the Core Steam system and NEFC system on a unified basis from 81.4 percent to 82.2 percent.[245]

Overtime Costs

In addition to above, Creative Energy proposes that overtime costs be allocated using the Massachusetts Formula because it considers overtime costs to be a function of all energy systems not solely the Core Steam system, where overtime costs for all energy systems are currently allocated. Creative Energy explains that the

[243] Exhibit B-14, BCUC IR 65.4.
[244] Exhibit B-1-1, Section 2.1.1, p. 8; Exhibit B-14, BCUC IR 65.4.
[245] Exhibit B-14, BCUC IR 65.4.

primary reason for overtime is typically to cover sick days, noting that in 2021 there were other factors that contributed to overtime work, including manhole work that had to occur on weekends.[246]

Creative Energy notes that accounting for overtime costs is challenging due to the work on multiple regulated systems and the work cannot be tracked to a specific energy system. It adds that the Massachusetts Formula provides an established methodology for allocating common costs among its energy systems.[247] Under the Proposed Rate Design, the net impact of this change in methodology would be a decrease of $3,428 or $.003/M#.[248] Creative Energy submits that its supporting schedules can be updated to reflect this change as part of the compliance filing for this Application.[249]

Positions of the Parties

Interveners did not take a position on these matters.

Panel Determination

The Panel approves Creative Energy to remove the cost of fuel from the NEFC operating revenues for the purposes of determining the allocation percentages for the Massachusetts Formula. This approach is consistent with Creative Energy's other regulated TES. The Panel is persuaded that removing the cost of fuel from the operating revenues input of the Massachusetts Formula is a practical approach to fairly estimate the proportion of costs that are attributable to each of the regulated energy systems.

Further, **the Panel approves Creative Energy's proposal to allocate overtime costs using the Massachusetts Formula.** The Panel accepts that overtime costs are not solely attributable to the Core Steam system, and this method simplifies the process for allocating overtime costs to each of the regulated TES.

Creative Energy is directed to re-calculate the allocation percentages for the Massachusetts Formula and the costs allocated to the Core Steam and NEFC systems in a compliance filing due to the BCUC within 45 days of the date of this decision.

Lastly, the Panel observes that Creative Energy filed its total 2022 gross forecast costs in response to IRs and not as part of the Application as directed by the decision accompanying Order G-349-21. The Panel considers the presentation of the gross costs, including the breakdown among the regulated TES, provides greater transparency of the cost sharing among the affiliates. Accordingly, **the Panel directs Creative Energy to provide in future RRAs, the total gross costs for Creative Energy Vancouver Platforms Inc., including a breakdown of all costs allocated to each of its TES and any other entities, and to identify whether the cost is directly assigned or allocated via the Massachusetts Formula.**

[246] Exhibit B-11, BCUC IR 32.2.
[247] Exhibit B-11, BCUC IR 32.2; Exhibit B-14, BCUC IR 79.2 and 79.4.
[248] Exhibit B-14, BCUC IR 79.4.
[249] Exhibit B-14, BCUC IR 79.4.1.

4.2.6 Property Taxes

Property taxes are paid to the City of Vancouver for the properties located at 720 Beatty Street and 701 Expo Boulevard.[250] The 2022 property tax forecast is $821,265 which is based on the actual assessments from 2021 adjusted for inflation of two percent, given that actual rates and assessed values for 2022 are not yet known.[251]

Creative Energy explains that consistent with the 2021 Core RRA, it has allocated a portion of the total property tax to its non-regulated operations, including leasing of surplus office space to tenants and parking rentals on land not used in utility operation, which reduces its revenue requirements.[252] To calculate the appropriate amount of property tax to be allocated to non-regulated operations, Creative Energy applies the levy rates to the total assessed value of the land and building and a portion is then allocated using square footage as an allocation base.[253] Creative Energy has also allocated out a portion of property taxes related to office staff that are not specifically working on the Core Steam system.[254]

In 2020, the BCUC approved Creative Energy's transfer of the development rights of 720 Beatty Street and 701 Expo Boulevard, which are surplus to the needs of the utility, to a developer for the construction of an office building and related improvements.[255] Based on the Trust Agreement between Creative Energy and the developer, Creative Energy submitted that property taxes will be equitably apportioned between the parties based on floor space usage, and any increase in property taxes as a result of property rezoning will be allocated to the developer. In 2021, Creative Energy stated that the developer had not yet begun to use any floor space and Creative Energy was not able to estimate the amount of space that will be used by the developer nor the number of months during the year, if any, that the developer will be using that space. In addition, Creative Energy submitted that the rezoning has not occurred.[256] In 2022, Creative Energy states that while the land transfer has already occurred, property tax will not be allocated to the developer until it starts using space that is dedicated to regulated operations, and this has not yet occurred.[257] Creative Energy elaborates that while the portion of land used for non-regulated operations will begin to be used for the redevelopment in 2022, this will not change the use of land that is currently used for regulated operations.[258]

Creative Energy acknowledges that in the 2021 Core RRA Decision, it was directed to address the allocation and accounting for land transferred to the developer in its 2022 RRA, and in the Application, it has continued to include the land in rate base at this time.[259] Creative Energy confirms that there is no change in the use of land, property taxes, or leases in 2022.[260]

Positions of the Parties

Interveners did not take a position on this matter.

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[250] Exhibit B-1-1, Section 2.3, p. 24.
[251] Exhibit B-1-1, Section 2.3, p. 24.
[252] Exhibit B-1-1, Section 2.3, p. 25.
[253] Exhibit B-1-1, Section 2.3, p. 25.
[254] Exhibit B-1-1, Section 2.3, p. 25.
[255] BCUC Order C-1-20.
[256] 2021 Core RRA Decision, Section 2.1.4, p. 15.
[257] Creative Energy Final Argument, p. 19.
[258] Creative Energy Final Argument, p. 19.
[259] Exhibit B-1-1, Section 2.7, p. 30.
[260] Exhibit B-14, BCUC IR 87.1.

Panel Determination

The Panel accepts that while the land transfer for the redevelopment has taken place, costs will not be allocated to the developer until it begins using the space dedicated to regulated operations. Accordingly, **with regard to the directive in Order G-349-21 for Creative Energy to address the appropriate allocation of property taxes in its next RRA, the panel finds that Creative Energy has not satisfied this directive. Therefore, the Panel directs Creative Energy to provide an update on the allocation of property taxes as part of its next RRA and to provide the cost allocation at the time the developer begins using the regulated space.**

4.2.7 Cost of Debt

Creative Energy proposes to increase its overall cost of debt from 4.0 percent to 4.5 percent based on its average indicative swap rates. [261] Creative Energy makes this request for both the Core Steam and the NEFC systems, and the request for both energy systems is discussed in this section.

The proposed increase to the cost of debt results in an amended 2022 forecast interest expense of $717,498 and $117,841 for the Core Steam and NEFC systems, respectively.[262] The interest rates that Creative Energy pays are based on variable rates of interest and on the consolidated debt to capitalization ratio for the preceding quarter. It adds that its debt facility rates are negotiated and the best rates available to Creative Energy at this time. Creative Energy notes that the Bank of Canada is expected to further increase interest rates throughout 2022 and 2023, evidenced by a three-month bankers acceptance rate of 1.33 percent.[263]

Positions of the Parties

Interveners did not make submissions on this matter.

Panel Determination

The Panel approves Creative Energy's proposed 4.5 percent cost of debt for the 2022 Test Year for the Core Steam and NEFC systems. The Panel acknowledges that the current financial market reflects an increasing interest rate trend which directly impacts the borrowing costs for Creative Energy and the 0.5 percent increase in the cost of debt is reasonable.

4.3 Capital

Creative Energy has forecast capital expenditures of approximately $3.03 million in 2022.[264] Of these forecast capital expenditures, Creative Energy forecasts approximately $2.29 million of capital additions which will enter rate base in 2022,[265] with the majority of these capital additions (i.e. $1.97 million) related to the rebuild of two existing manholes.[266]

[261] Exhibit B-11, BCUC 40.2.
[262] Exhibit B-12, p. 8.
[263] Exhibit B-11, BCUC 40.2.
[264] Exhibit B-11, BCUC IR 49.1.
[265] Exhibit B-6, p. 2.
[266] Exhibit B-6, p. 2.

Creative Energy forecasts $0 of incremental capital additions specifically for the Core Steam Plant in 2022, given that it will be replaced over the next two years.[267] Creative Energy states that this is a special circumstance, that no specific projects are planned for 2022 and that it will undertake safety or efficiency expenditures if required.[268] During the proceeding, Creative Energy provided an update that as of April 2022, approximately $194,000 of capital additions at the Core Steam Plant have been incurred to maintain safe and reliable service.[269]

Creative Energy observes that there is a low level of inquiry by interveners into its forecasts of annual cost of service, load and associated revenue requirement matters.[270] Creative Energy submits that forecasting $0 of capital additions at its Core Steam Plant in 2022 is a prudent approach due to the planned redevelopment and decommissioning of existing assets at the plant.[271]

Positions of the Parties

The CEC and RCIA take no position regarding forecast 2022 capital expenditures and additions.

Panel Determination

The Panel finds the forecast capital expenditures of approximately $3.03 million in 2022 to be reasonable. The Panel accepts the forecast rate base additions as being reasonable. Further the Panel accepts Creative Energy's approach to forecasting capital additions for the Core Steam Plant to be prudent given the planned redevelopment and decommissioning of existing assets at the plant.

4.4 Deferral Accounts

4.4.1 Water Cost Deferral Account

Creative Energy seeks approval of a WCDA on an ongoing basis to record variances between forecast and actual water costs, with the balance attracting interest at Creative Energy's short-term debt rate and amortized over one year.[272] The BCUC previously approved the WCDA for the Fiscal 2020 and 2021 test years.[273]

Creative Energy notes that the two factors that primarily contribute to the variance in water costs are: (i) load forecast; and (ii) water rates.[274] Water rates are set by the City of Vancouver and water use volumes are driven by steam load, both of which are uncertain and outside of Creative Energy's control.[275] Creative Energy notes that the factors contributing to the water cost variance are comparable to the fuel cost risk that Creative Energy

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267 Exhibit B-11, BCUC IR 45.3; Creative Energy Beatty-Expo Plants Redevelopment Final Design Proceeding.

268 Exhibit B-11, BCUC IR 45.3.1 & 45.4; Exhibit B-14, BCUC IR 82.2.

269 Exhibit B-14, BCUC IR 82.2.

270 Creative Energy Final Argument, para. 77.

271 Creative Energy Final Argument, para. 81.

272 Exhibit B-1-1, Section 3.2.1, pp. 35–36; Exhibit B-11, BCUC IR 50.11.

273 BCUC Order G-227-20 and BCUC Order G-310-21.

274 Exhibit B-11, BCUC IR 50.3.

275 Exhibit B-11, BCUC IR 50.3, 50.3.1, and 50.10.

faces under externally set rates and that is managed through Creative Energy's approved Fuel Cost Stabilization (deferral) Account and rate rider mechanism.[276]

The 2019–2020 Core and NEFC RRA proceeding along with the 2021 Core RRA proceeding reviewed a water cost model that forecasts water costs and converts units of steam into units of water to ensure that forecast costs are calculated in the same manner as the City of Vancouver bills.[277] However, Creative Energy states that the model cannot be further refined[278] and that the modifications that were made do not improve the accuracy in forecasting load and water rates, as these two factors, which are both outside of Creative Energy's control, are model inputs. Creative Energy adds that under a scenario where actual load and water rates are equivalent to forecast, there should not be any material variances in water costs.[279]

Creative Energy considers that a WCDA on an ongoing basis will mitigate a significant risk that a public utility should not have to bear, being the variance between actual and forecast amounts that can vary significantly due to factors outside of Creative Energy's control. It adds that the incentives for Creative Energy management to manage controllable costs are not reduced by the proposed WCDA, as these costs are not controllable by management.[280]

Positions of the Parties

Interveners do not take a position on the WCDA.

Panel Determination

The Panel approves Creative Energy's proposal to establish a WCDA on an ongoing basis accruing interest at Creative Energy's short-term debt rate and to record the variance between forecast and actual water costs with the balance to be amortized over a one-year period. The Panel accepts that Creative Energy's approach is reasonable, given that the forecast model cannot be further refined to more accurately forecast water costs and the factors that contribute to the variance are outside management's control. The Panel notes that interveners did not take a position on this proposed treatment.

4.4.2 Refinancing Cost Deferral Account

Refinancing costs apply to both the Core Steam and NEFC systems, and for efficiency, the treatment of these costs for both systems is addressed in this section.

Creative Energy renewed its existing credit facility with HSBC and TD on September 15, 2021, at a cost of $126,621, which includes both fees charged by HSBC and TD and legal costs as follows: (i) $55,020 upfront closing fees to HSBC and TD; (ii) $13,755 to HSBC as the lead arranger; (iii) $12,500 in agency fees; and (iv)

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[276] Exhibit B-11, BCUC IR 50.10.

[277] Exhibit B-11, BCUC IR 50.4; Creative Energy Final Argument, Section 13.4, para. 103, p. 23.

[278] Exhibit B-11, BCUC IR 50.5.1.

[279] Exhibit B-1-1, Section 3.2.1, p. 36; Exhibit B-11, BCUC IR 50.4.

[280] Exhibit B-1-1, Section 3.2.1, p. 36; Exhibit B-11, BCUC IR 50.10; Exhibit B-14, BCUC IR 92.2.

$45,346 in legal fees.[281] These refinancing costs are forecast to be recurring in years when the debt agreement is renewed. The next renewal is expected to take place September 2023.[282]

Financing fees are allocated to each of Creative Energy's energy systems based on the capital costs for each energy system. Creative Energy submits that the credit facility only relates to debt for the regulated operations and assets in Creative Energy Vancouver Platforms Inc.[283] and is used primarily to fund its working capital and capital assets.[284] It adds that the credit facility is not associated with the proposed re-organization, and the refinancing costs do not include any legal fees from Creative Energy's counsel or any fees related to its parent, CEDLP.[285] Based on the 2022 capital asset balances, the amount allocated to the Core Steam system and the NEFC system would be $108,641 or 85.8 percent.[286]

Creative Energy submits that refinancing costs are part of its normal course of business and will be required each time debt is renewed.[287] It adds that although it is able to forecast the timing of when financing fees will occur, each negotiation of a renewal agreement can be unique and the costs, particularly legal fees, are difficult to project in advance and over which Creative Energy has no control.[288] Based on this, Creative Energy seeks approval to establish a RCDA on an ongoing basis to record refinancing costs.[289] Given the short nature of the loan and related expense, Creative Energy proposes to record carrying costs based on its weighted average cost of debt and to amortize the allocated balance of $108,641 over a two-year period commencing January 1, 2022, coincident with the recognition of the expense for accounting purposes over the term of the existing agreement.[290] Future amortization periods would depend on the term of the negotiated debt agreement.[291]

Creative Energy notes that of the total refinancing costs of $126,621, only $18,466 was amortized for accounting purposes in 2021, with the remainder to be amortized in 2022 and 2023. Creative Energy did not separately apply for the RCDA in the 2021 fiscal year, prior to the financing fees being incurred, as it considered the most efficient approach would be to include this as a component of this Application.[292] It adds that the refinancing costs amortized for accounting purposes in 2021 and proposed to be included in the RCDA do not result in retroactive ratemaking. Creative Energy provides two examples where the BCUC approved a utility's request to establish a deferral account (Orders G-17-08 and G-64-09) which included costs that were incurred prior to receiving approval on the regulatory treatment.[293] It adds that a timely application to establish a regulatory deferral account is well-recognized by the BCUC as an exception to any concerns about retroactive ratemaking.[294]

281 Exhibit B-1-1, Section 3.2.2, p. 36; Exhibit B-11, BCUC IR 51.6.
282 Exhibit B-1-1, Section 3.2.2, p. 36.
283 This includes the Core Steam System, NEFC system, Southdown Heating and Cooling systems, Kensington system and Main & Keefer system (Exhibit B-11, BCUC IR 51.3).
284 Exhibit B-11, BCUC IR 51.1 and 51.3; Exhibit B-14, BCUC IR 93.1.
285 Exhibit B-1-1, Section 3.2.2, p. 36.
286 Exhibit B-1-1, Section 3.2.2, p. 36.
287 Exhibit B-11, BCUC IR 51.2.
288 Exhibit B-14, BCUC IR 93.7.
289 Exhibit B-1-1, Section 3.2.2, p. 36.
290 Exhibit B-11, BCUC IR 51.3 and 51.12; Exhibit B-14, BCUC IR 93.9.
291 Exhibit B-14, BCUC IR 93.10; Exhibit B-11, BCUC IR 51.9 and 51.10.2; Exhibit B-14, BCUC IR 93.2 and 93.10.
292 Exhibit B-11, BCUC IR 51.10.1.1.
293 Exhibit B-14, BCUC IR 93.2.
294 Exhibit B-14, BCUC IR 93.2; Creative Energy Final Argument, Section 3.2.4, para. 108, p. 23.

Creative Energy notes that a similar deferral account request was made in the 2021 Core RRA and the points raised in the decision did not relate to retroactive ratemaking. Rather, the substantive points made were that the BCUC denied recovery of the portion of the 2020 refinancing costs that were directly related to the corporate reorganization approved under Order C-1-20, as those costs were not incurred in the ordinary course of business.[295]

Creative Energy states that it is open to the refinancing costs being captured in a deferral account or for the costs to be added directly to regular revenue requirement for 2022 and 2023. Creative Energy notes that regardless of method, the cost recovered from rate payers would be the same for 2022 and 2023. The deferral account method was the approach Creative Energy took as it was consistent with what was already approved for the 2021 RRA and allows for clear tracking of the amount of cost that would be included in rates in 2023.[296]

Positions of the Parties

Interveners do not comment on the RCDA.

Panel Determination

The Panel acknowledges that refinancing costs, specifically legal fees, are difficult to forecast and outside Creative Energy's control, and when prudently incurred should be recovered from ratepayers. However, the Panel is concerned that the recovery in future years of costs that were amortized in 2021 amounts to retroactive ratemaking as discussed below.

The BCUC has the authority under law to set rates on a prospective basis only and has no authority to allow recovery on a retroactive basis. The rule against retroactive ratemaking is well-established. The Supreme Court of Canada stated in *ATCO Gas & Pipelines Ltd. v. Alberta (Energy & Utilities Board) (ATCO Decision):*

> …The Board was seeking to rectify what it perceived as a historic overcompensation to the utility by ratepayers. There is no power granted in the various statutes for the Board to execute such a refund in respect of an erroneous perception of past over-compensation. It is well established throughout the various provinces that utilities boards do not have the authority to retroactively change rates…[297]

Consistent with this statement in the ATCO Decision, the BCUC typically sets rates on a prospective basis only and does not allow recovery on a retroactive basis, that is, once rates have been made permanent. Well-established exceptions to retroactive ratemaking include, in part, the following: setting of interim rates, which are subject to later adjustment; and recognition of amounts in deferral accounts to be carried forward to be disposed of in future years.[298] The Panel notes that 2021 rates for the Core Steam system and NEFC system were made permanent by Order G-310-21A dated October 29, 2021 and Order G-104-21 dated April 6, 2021, respectively.

The Panel notes that of the total refinancing costs allocated to the Core Steam and NEFC systems of $108,641 includes an amount that was amortized for accounting purposes in 2021, with the remainder to be amortized in

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[295] Exhibit B-11, BCUC IR 51.5; Exhibit B-14, BCUC IR 93.2; BCUC Order G-310-21 and accompanying decision, Section 2.2.6, pp. 36–40.
[296] Exhibit B-14, BCUC IR 93.3.
[297] ATCO Gas & Pipelines Ltd. v. Alberta (Energy & Utilities Board), 2006 SCC 4 (CanLII), [2006] 1 SCR 140, par. 71; Retrieved from: https://canlii.ca/t/1mj7l#par71
[298] Creative Energy Vancouver Platforms Inc. 2019–2020 Revenue Requirements Application for the Core Steam System and Northeast False Creek Service Areas, Decision and BCUC Order G-227-20, p. 39.

2022 and 2023. Creative Energy's proposal to recover the costs amortized in 2021 through the use of the RCDA is effectively an adjustment to 2021 rates that have already been approved on a permanent basis, albeit the rate impact of that adjustment, if the proposal is approved, would be deferred to and reflected in 2022 through the deferral account mechanism. **The Panel finds the recovery of the refinancing costs amortized in 2021 and allocated to the Core Steam and NEFC systems would constitute retroactive ratemaking and therefore recovery thereof is denied.** The Panel notes that the consolidated amount of the refinancing costs amortized in 2021 is $18,466. **Creative Energy is directed to provide the amount of refinancing costs amortized in 2021 and allocated to the Core Steam and NEFC systems in a compliance filing due to the BCUC within 45 days of the date of this decision, and to exclude these amounts from the final, permanent rates, effective January 1, 2022.**

The Panel notes that one of the well-established regulatory exceptions to the rule against retroactive ratemaking is recognition of amounts in deferral accounts to be carried forward to be disposed of in future years. While the Panel has denied the recovery of costs amortized in 2021, the Panel considers that it is not unjust, unreasonable, unduly discriminatory, or unduly preferential to approve the RCDA to capture refinancing costs forecast to be amortized in 2022 and 2023.

Based on this, **the Panel approves for Creative Energy to establish a RCDA, accruing interest at Creative Energy's weighted average cost of debt, to record the refinancing costs incurred to renew its existing credit facility with HSBC and TD on September 15, 2021 and allocated to the Core Steam and NEFC systems, net of any refinancing costs amortized in 2021.** The Panel notes that the consolidated amount of the refinancing costs to be amortized in 2022 and 2023 is $108,155.[299] **Creative Energy is directed to provide the amount of refinancing costs incurred to renew its existing credit facility with HSBC and TD on September 15, 2021 and allocated to the Core Steam and NEFC systems, net of any refinancing costs amortized in 2021, in a compliance filing due to the BCUC within 45 days of the date of this decision. The balance of the RCDA is to be amortized over a period of two years, commencing January 1, 2022.**

In the Panel's view, reviewing the deferral mechanism for the next refinancing agreement is preferable to approving the deferral account on an ongoing basis. The Panel recognizes that this creates additional regulatory and administrative burden, but the additional burden is not onerous and will provide an opportunity to review the specific refinancing costs and the deferral mechanisms for future refinancing renewals. Accordingly, **the Panel denies Creative Energy's request to maintain the RCDA on an ongoing basis.**

In future, the Panel expects Creative Energy to file for approval of the RCDA in advance of the refinancing renewal, using management's best estimate of the forecast refinancing costs to be deferred.

4.4.3 COVID-19 Deferral Account

In 2020, the BCUC approved the establishment of the COVID-19 Deferral Account for the Core Steam system to record the following: [300]

[299] BCUC calculated portion of the total refinancing costs that are to be amortized in 2022 and 2023. Total refinancing costs ($126,621) less the amount amortized in 2021 ($18,466) results in $108,155.
[300] BCUC Order G-214-20.

a. Any incremental, unplanned expenses and cost savings related to the COVID-19 pandemic that Creative Energy has incurred related to continuing safe and reliable operations, including any incremental financing cost;
b. Any unrecoverable revenues (bad debt) resulting from customers that do not pay their bills due to the impacts of COVID-19 on their financial circumstances; and
c. Any direct revenue loss resulting from the loss of load from customers due to the impacts of COVID-19 on their operational and financial circumstances.

To ensure transparency of the deferral account balances, Creative Energy was also directed by the BCUC under the same order to report on the COVID-19 Deferral Account balances on a quarterly basis starting October 30, 2020.[301]

In the 2021 Core RRA Decision the BCUC approved a 2021 annual steam load forecast which reflected a 15 percent reduction from the 2020 approved load forecast adjusted for new customer load growth in 2021. The BCUC noted that customer demand may increase in 2021, as the economy reopened and was of the view that the ongoing impacts of the pandemic were outside of the control of the utility. Accordingly, for 2021, Creative Energy was directed to capture the variance between the 2021 approved steam load forecast and the actual steam load in the COVID-19 Deferral Account. In the same decision, the BCUC also directed Creative Energy to file its proposal for recovery of the COVID-19 Deferral Account as part of its next RRA.[302]

On December 17, 2022, Creative Energy filed its proposed approach to recover the balance of the COVID-19 Deferral Account.[303] Specifically, Creative Energy proposes to maintain the COVID-19 Deferral Account in 2022 while the pandemic and its impacts on its customers persist and to continue to report quarterly on the deferral account balance. Additionally, Creative Energy proposes that, coincident with each quarterly review, if the COVID-19 Deferral Account balance exceeds a threshold of plus or minus $500,000, it would at that time file with the BCUC an application for a separate rate rider to recover the account balance.[304] Creative Energy established the $500,000 threshold with reference to the month-to-month variability in cash flows and considers that this threshold can be readily managed under its existing line of credit.[305] In Creative Energy’s view, a threshold of $500,000 may mitigate the risk of rate instability and promote regulatory efficiency when recovery or disbursement of the balance becomes warranted.[306] Creative Energy expects that a one-year amortization period would likely be appropriate to recover the COVID-19 Deferral Account through a separate rate rider. This would amount to an average rate increase or decrease of approximately $0.50 per thousand pounds of steam, or an approximate two percent overall rate impact.[307] Creative Energy considers this to be a reasonable rate impact and consistent with the administration of other deferral accounts.[308]

[301] BCUC Order G-214-20.
[302] Creative Energy 2021 RRA for the Core Steam System Decision, accompanying BCUC Order G-310-21, Section 2.4, p. 41 and 44.
[303] Exhibit B-7, p. 1.
[304] Exhibit B-7, pp. 2, 8.
[305] Exhibit B-7, pp. 2, 8; Exhibit B-11, BCUC IR 52.9; Exhibit B-14, BCUC IR 94.2.
[306] Exhibit B-11 BCUC IR 52.10; Exhibit B-14, BCUC IR 94.2.
[307] Exhibit B-7, p. 8; Exhibit B-11, BCUC IR 52.11.
[308] Exhibit B-14, BCUC IR 94.3 and 94.5.

In response to IRs, Creative Energy noted that load is returning to pre-pandemic levels and stated that particular cost components of the unplanned expenses of the COVID-19 Deferral Account are unlikely to still be required going forward.[309] Accordingly, Creative Energy revised its proposal for the COVID-19 Deferral Account as follows:[310]

- Maintain the COVID-19 Deferral Account in 2022 and if at the end of any quarter in 2022 the deferral account balance exceeds plus or minus $500,000, apply to the BCUC for approval of a separate rate rider to recover the balance, as described above; and
- Monitor the need for the deferral account and subject to the impact of the pandemic, apply to close the COVID-19 Deferral Account as part of the next RRA, effective January 1, 2023. Creative Energy notes that it would propose to maintain a load forecast variance account following the closure of the COVID-19 Deferral Account.

Creative Energy notes that the recovery mechanism may be a moot subject with respect to the Amended Load Forecast and the future consideration to close the deferral in 2023, as further discussed below.[311]

The balance of the COVID-19 Deferral Account is ultimately dependent on the load forecast that is approved for 2022 rate setting.[312] Creative Energy notes that the balance of the COVID-19 Deferral Account as at April 30, 2022 is in a liability position[313] of approximately $1.1 million, an increase of approximately $842,000 for the first four months of 2022. This increase is primarily attributable to interim rates being based on a lower load forecast. Creative Energy notes that the liability balance of the COVID-19 Deferral Account will be reduced under a scenario where the Amended Load Forecast is used. Creative Energy submits that had it been billing based on the Amended Load Forecast for the period of January 1 to April 30, 2022, the liability balance of the COVID-19 Deferral Account balance would have increased by less than $100K from approximately $268K at December 31, 2021.[314]

Positions of the Parties

Interveners do not take a position on the COVID-19 Deferral Account.

Panel Determination

The Panel approves the continuance of the COVID-19 Deferral Account for the 2022 Test Year to capture:

a. **Any incremental, unplanned expenses and cost savings related to the COVID-19 pandemic that Creative Energy has incurred related to continuing safe and reliable operations, including any incremental financing cost;**

b. **Any unrecoverable revenues (bad debt) resulting from customers that do not pay their bills due to the impacts of COVID-19 on their financial circumstances; and**

c. **The variance between the 2022 approved steam load forecast and the actual steam load.**

While the approach to the pandemic has primarily shifted from controlling spread to strategies to manage the disease, the Panel recognizes that some uncertainty may remain with respect to mitigating associated risks to

309 Exhibit B-11, BCUC IR 52.1; Exhibit B-12, p. 4.

310 Exhibit B-14, BCUC IR 94.4; Creative Energy Final Argument, Section 1.3.4, para. 30, p. 8.

311 Exhibit B-14, BCUC IR 94.5.

312 Creative Energy Final Argument, Section 13.4, para. 28, p. 7.

313 A liability balance in the COVID-19 Deferral Account represents amounts that are owed to customers.

314 Exhibit B-14, BCUC IR 94.13.

health and safety of workers, operations, and projects. The Panel considers it reasonable for the deferral account to remain in place for the 2022 Test Year to provide a means for Creative Energy and its customers to adjust to any continuing impacts of the pandemic. The return to normalcy is currently underway and the Panel expects that any future impact of the pandemic could be incorporated in the forecast cost of service.

The Panel has approved the Amended Load Forecast for the Core Steam System, and together with the timing of this decision, agrees with Creative Energy that the proposed recovery mechanism for 2022 is rendered moot. Accordingly, the Panel confirms there will be no amortization of the COVID-19 Deferral Account to be recovered in rates for 2022.

Based on this, **the Panel directs Creative Energy to include with its next RRA: (i) a proposal to close the COVID-19 Deferral Account, including the disposition of the existing balance; and (ii) a proposal to establish a new load variance deferral account, including the following:**

- **(i) The factors that contribute to variances between forecast and actual loads that would be appropriate to include in the deferral account;**
- **(ii) The proposed interest rate; and**
- **(iii) Proposed amortization period.**

5.0 2022 Load Forecast and Revenue Requirement for the NEFC System

In this section, the Panel reviews Creative Energy's 2022 forecast revenue requirement and 2022 load forecast on a standalone basis and in the context of reviewing NEFC rates.

5.1 Load Forecast

Creative Energy's 2022 annual thermal energy heating load forecast for the NEFC system is 19,566 MWh.[315]

The total 2022 NEFC load is served by the Core Steam Plant and converted to hot water for distribution to NEFC customers at two steam-to-hot-water stations. The NEFC load comprises of four connected buildings with a total floor area of 162,481 square metres.[316]

Creative Energy forecasts thermal energy heating demand in MWh and applies a conversion factor of 0.347 MWh/M#.[317] Creative Energy confirms that the NEFC 2022 load forecast is based on the approved pre-pandemic 2020 Core load forecast submitted in Creative Energy's 2019–2020 Core and NEFC RRA.

The actual 2021 NEFC load of 19,692 MWh aligns with Creative Energy's 2022 load forecast of 19,566 MWh for the NEFC system. A 2022 NEFC load forecast of 20,964 MWh was also provided based on full occupancy of all four buildings connected to the NEFC system. Creative Energy states that it is "effectively indifferent" to

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[315] Exhibit B-1, Section 3.1, p. 12.

[316] Exhibit B-1, Section 3.1, p. 12.

[317] Exhibit B-1, Section 4.1.2, p. 21.

whether an NEFC load forecast of 20,964 MWh or 19,566 MWh would be used by the BCUC for 2022 rate-setting purposes.[318]

Positions of the Parties

No intervener submissions were filed on this matter.

Panel Discussion

The Panel considers that the 2022 load forecast of 19,566 MWh for the NEFC system is reasonable for the purposes of setting rates. Creative Energy proposes to use a pre-pandemic NEFC load forecast equivalent to the 2020 load forecast which the Panel considers reasonable given there are no new NEFC customers.

5.2 Revenue Requirement

The Panel must assess if the 2022 forecast revenue requirement for the NEFC system appropriately reflects the total amount of revenue that would be collected in rates for Creative Energy to recover its forecast costs of service and to provide it an opportunity to earn a reasonable return.

The Panel approved interim rates, effective January 1, 2022, for the NEFC system based on the Existing Rate Design on a refundable/recoverable basis. The interim rates were established based on a 10 percent increase over the 2021 approved rates, consistent with BCUC-approved rate increases in 2020 and 2021.[319] The BCUC considered this level of increase was a reasonable approach to reducing additions to the NEFC RDDA while keeping the rate increase below the level typically associated with rate shock.[320]

As note above, while the cost of service and revenue requirements of the Core Steam and NEFC system will be consolidated, and the impacts of doing so are additive, Creative Energy separately reports the key revenue requirement components of the Core Steam and the NEFC systems to facilitate a comparison to recent RRAs where the forecast revenue requirements were presented.[321]

Creative Energy's 2022 forecast revenue requirement of approximately $2.48 million for the NEFC system is set out in Table 15, below:

Table 15 – 2022 NEFC Forecast Revenue Requirement

Component	2021 Approved[322]	2022 Forecast[323]
Fuel	968,739	1,082,764
Steam Tariff	571,651	596,858
Operation and Maintenance Expenses	169,763	237,881
Municipal Access Fees or Taxes	23,143	25,807
Non-Operating and Other		

[318] Exhibit B-14, BCUC IR 69.4.

[319] Exhibit B-11, BCUC IR 44.9; BCUC Order G-227-20 and BCUC Order G-104-21.

[320] 2019–2020 Core and NEFC RRA decision accompanying BCUC Order G-227-20, Section 5.1, pp. 47, 50, 51.

[321] Exhibit B-1-1, Section 1.1, p. 1.

[322] Exhibit B-12, Updated NEFC 2022 RRA Schedules - Separate; Exhibit B-1-1, Section 2.1.3, p. 10.

[323] Exhibit B-12, p. 3, Updated NEFC 2022 RRA Schedules - Separate; Exhibit B-2, NEFC 2022 RRA Schedules – Separate.

Property Taxes		
Income Taxes	26,329	30,146
Depreciation	210,400	204,100
Cost of Debt[324]	108,000	118,000
Return on Equity[325]	189,000	184,000
Amortization of Deferral Accounts		
Total Revenue Requirement	**$2,267,024**	**$2,479,556**

As part of its Application, and during the proceeding, Creative Energy included proposals that impact the 2022 revenue requirements for both the Core Steam and the NEFC systems. For efficiency, each of these proposals as identified below, is addressed above as part of the 2022 forecast revenue requirements for the Core Steam system:

- To (i) increase its forecast IT costs to upgrade the systems; and (ii) reduce the allocation of IT costs to regulated operations. Refer to Section 4.2.2 for further information.
- To correct a misallocation of Outside Services costs. Refer to Section 4.2.4 for further information.
- To (i) revise the operating revenues used to determine the allocation percentages for the Massachusetts Formula; and (ii) to allocate overtime costs using the Massachusetts Formula. Refer to Section 4.2.5 for further information.
- To increase its overall cost of debt from 4.0 percent to 4.5 percent Cost of Debt. Refer to Section 4.2.7 for further information.

No other specific issues were identified with respect to NEFC's 2022 forecast revenue requirements. The NEFC deferral accounts are discussed in Section 5.3.

Positions of the Parties

The CEC does not take issue with the 2022 forecast revenue requirements for the NEFC system and "recommends that the Commission accept the cost components provided by Creative Energy for the purposes of rate setting."[326] The RCIA makes no final submissions on the cost-of-service components and "defers to other interveners who may wish to take issue with any of these other cost-of-service items."[327]

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[324] The breakdown of the cost of debt and return on equity for "2021 Approved" and "2022 Forecast" was taken from the following references: (i) 2021 NEFC RRA proceeding, Exhibit B-1, "Appendix C – NEFC RRA Schedules", worksheet "Sch 13 CS_COC NEFC", Excel cells H27 and H28; and (ii) Exhibit B-12, Attachment "Updated 2022 NEFC RRA Schedules – Separate", worksheet "Sch 13 CS_COC NEFC", Excel cells H27 and H28.

[325] Creative Energy calculates its return on equity based on a mid-year rate base figure ($4,552,821 (Exhibit B-12, Attachment "Updated 2022 NEFC RRA Schedules – Separate", worksheet "Sch 13 CS_COC NEFC", Excel cell H7)), a deemed capital structure that is 42.50 percent equity (in accordance with the decision accompanying BCUC Order G-47-14 (p. 132)), and a return on equity of 9.50 percent (in accordance with the 2015 NEFC CPCN decision, pp. 60–62).

[326] The CEC Final Argument, Section V, and Conclusion para. 125.

[327] RCIA Final Argument, Section 2.2.

Panel Determination

The Panel finds the 2022 forecast revenue requirements for the NEFC system to be reasonable for the purposes of setting rates in the 2022 Test Year, subject to the directives and determinations in this decision.

5.3 Deferral Accounts

Currently under the Existing Rate Design, the NEFC service area includes three deferral accounts, the NEFC RDDA, the NEFC Variance Deferral Account, and a COVID-19 deferral account (NEFC COVID-19 Deferral Account). As noted above, the NEFC RDDA records BCUC-approved forecast revenue shortfalls for the NEFC system in the early years due to timing differences between the installation of the NEFC system and the forecast buildout of the service area.[328] The BCUC approved 2021 additions of $442,987 (debit) to the NEFC RDDA in the 2021 Core NEFC RRA Decision, resulting in a balance at December 31, 2021 of $2,570,367 (debit).[329] As noted in Section 3.0, under the Proposed Rate Design, no future additions will be made to the NEFC RDDA, however, it will be maintained and recovered as part of the NEFC System Contribution Charge as discussed in Section 3.1.[330] Further, under the Proposed Rate Design, Creative Energy proposes to transfer the ending 2021 NEFC Variance Deferral account balance to the NEFC RDDA and thereby recover the net NEFC RDDA balance through the NEFC System Contribution Charge[331] and subsequently close the NEFC Variance Deferral Account. [332] However unlike the NEFC RDDA, the 2021 additions to the NEFC Variance Deferral Account have not been approved by the BCUC.

Based on this, the 2021 additions to the NEFC Variance Deferral Account and the NEFC COVID-19 Deferral Account are addressed in the following subsections.

5.3.1 NEFC Variance Deferral Account

The NEFC Variance Deferral Account captures the following operating cost components that are considered to be outside management's control:[333]

- Variances between forecast and actual revenues;
- Variances between forecast and actual Core Steam rates and fuel cost charged to NEFC;
- Variances between forecast and actual distribution expenses[334]; and
- Variances between forecast and actual Income Tax expense.

The BCUC-approved balance of the NEFC Variance Deferral Account at the end of 2020 is $636,489 (credit). Creative Energy's 2021 proposed additions are $205,105 (debit), and including interest calculated at Creative Energy's weighted average cost of capital of $33,852 (credit), the proposed deferral account balance at

[328] Exhibit B-1, Section 2.2.1, p. 6.
[329] Exhibit B-11, BCUC IR 18.1; 2021 NEFC RRA Decision, Section 2.2, p. 9.
[330] Exhibit B-1, Section 5.1, p. 30.
[331] Exhibit B-1, Section 5.2.3, p. 32.
[332] Exhibit B-1, Section 5.1, p. 30.
[333] Exhibit B-1, Section 2.2.1, pp. 6–7.
[334] Distribution expenses include GL Accounts 870, 874 and 880.

December 31, 2021 is $465,235 (credit).[335] A breakdown of the 2021 NEFC Variance Deferral Account additions is provided in the following table.

Table 16: Breakdown of the 2021 NEFC Variance Deferral Account Additions[336]

Item	**2021**		
	Revenue Requirement	**Actual**	**Variance**
Fuel (Internal)	968,738	1,052,262	83,524
Steam Tariff (Internal)	571,651	658,867	87,216
Distribution Expense[337]	80,956	121,089	40,133
Income Tax Expense	26,329	53,956	27,627
Revenues (External)	(1,851,416)	(1,884,811)	(33,395)
Variance Deferral Addition			**205,105**

Creative Energy notes that fuel and steam tariff costs include significant additions and explains that this is due to higher actual load and higher actual rates than those used to determine the 2021 forecast revenue requirements as approved by the BCUC in the 2021 NEFC RRA Decision. Creative Energy also identified the variance for Distribution Expense[338] to be notable, and stated that the variance was a result of higher actual labour costs and higher repairs and maintenance, specifically related to mains and services, than included in the 2021 revenue requirements as approved by the BCUC.[339]

Positions of the Parties

Interveners did not comment on the NEFC Variance Deferral Account, including the 2021 additions.

Panel Determination

The Panel approves Creative Energy to record in the NEFC Variance Deferral Account the 2021 additions of $205,105. In Section 3.1, the Panel approved Creative Energy to transfer the December 31, 2021 credit balance of $465,235 recorded in the NEFC Variance Deferral Account to the NEFC RDDA, and subsequently close the NEFC Variance Deferral Account. The net NEFC RDDA balance will be recovered through the NEFC System Contribution Charge.

5.3.2 NEFC COVID-19 Deferral Account

In 2020, the BCUC approved the establishment of the NEFC COVID-19 Deferral Account to record any unrecoverable revenues (bad debt) resulting from customers that do not pay their bills due to the impacts of COVID-19 on their financial circumstances.[340] By the same order, Creative Energy was also directed by the BCUC

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[335] Exhibit B-11, BCUC IR 18.1.

[336] Exhibit B-11, BCUC IR 18.1.

[337] For consistency, BCUC staff revised the row title from “Operations and Maintenance Expense” as presented in the table in response to BCUC IR 18.1 (Exhibit B-11) to “Distribution Expense” as provided in Application Part One (Exhibit B-1, Section 2.2.1, pp. 6–7).

[338] For consistency, BCUC staff revised “Operations and Maintenance” expense as presented in response to BCUC IR 18.1 (Exhibit B-11) to “Distribution” expense for consistency with the presentation in Application Part One (Exhibit B-1, Section 2.2.1, pp. 6–7).

[339] Exhibit B-11, BCUC IR 18.1.

[340] BCUC Order G-214-20.

to report on the NEFC COVID-19 Deferral Account balances on a quarterly basis starting October 30, 2020 in order to ensure transparency of the deferral account balances.[341]

Creative Energy states that there are no unrecoverable revenues from customers on the NEFC system in relation to the impacts of COVID-19.[342] It adds that it does not expect to require the NEFC COVID-19 Deferral Account going forward as there are no customer balances known to be uncollectable.[343]

Positions of the Parties

Interveners do not comment on the NEFC COVID-19 Deferral Account.

Panel Determination

The Panel acknowledges that there are no unrecoverable revenues in relation to the impacts of the pandemic on the NEFC system nor does Creative Energy expect there to be uncollectible balances in the future. Accordingly, **the Panel directs Creative Energy to close the NEFC COVID-19 Deferral Account and cease reporting at the end of 2022.** The disposition of any balance in this deferral will be addressed by the BCUC in the next RRA.

6.0 Core Steam and NEFC Systems 2022 Rates and Proposed Rate Design Implementation Date

In Sections 4.0 and 5.0 above, the Panel reviewed the 2022 load forecast and forecast revenue requirements for each the Core Steam and NEFC systems on a standalone basis, and together, these form the basis of the 2022 rates for the energy systems. Creative Energy notes that while it proposes to consolidate the revenue requirements under its Proposed Rate Design, the impact of consolidation is generally additive.[344]

In Section 3.6 of this decision, the Panel found that the Proposed Rate Design should be implemented. In setting rates for January 1, 2022, the Panel needs to determine whether the Proposed Rate Design should be implemented effective January 1, 2022 or 2023. The 2021 approved permanent rates, 2022 approved interim rates, and 2022 indicative rates under the Existing Rate Design and the Proposed Rate Design are as follows:

Table 17: Summary of 2021 Permanent and 2022 Interim and Indicative Rates[345]

	2021	2022		
	Approved Permanent Under Existing Rate	**Approved Interim Under Existing Rate Design[347]**	**Indicative Under Existing Rate Design**	**Indicative Under Proposed Rate Design[348]**

[341] BCUC Order G-214-20.

[342] Exhibit B-11, BCUC IR 53.1; Exhibit B-14, BCUC IR 95.1.

[343] Exhibit B-14, BCUC IR 95.1 and 95.2.

[344] Exhibit B-1-1, Section 1.1, p. 1.

[345] BCUC Order G-11-22; Exhibit B-14, Attachment BCUC IR 56.3. The rates presented under the Proposed Rate Design are based on the Rate Structure Model, and Creative Energy notes that the rates are indicative for comparison purposes (Exhibit B-14, BCUC IR 56.3).

[347] BCUC Order G-11-22.

[348] Under the Proposed Rate Design the rates, charged in the Core Steam service area would the be same as that charged in the NEFC service area, with the exception of the system contribution charge ($9.50/MWh) that is applicable to the NEFC service area only.

		Design[346]			
Core Steam					
Steam	Average $/M#	9.78	10.45	9.08	9.72
Fuel	Average $/M#[349]	12.50	18.50	18.50	18.50
Total	Average $/M# Average $/MWh[350]	22.28 64.21	28.95 83.42	27.58 79.48	28.22 81.33
NEFC Hot Water					
Fixed	$/m2/mo	0.33	0.36	0.36	n/a
Variable	$/MWh	63.04	69.34	69.34	81.33[351]
System Contribution Charge	$/MWh	n/a	n/a	n/a	9.50[352]
Total	Average $/MWh[353]	95.93	105.52	105.52	90.83

Unlike the approved interim rates under the Existing Rate Design, the indicative rates presented in the above table take into account the Amended Load Forecast filed as part of the Evidentiary Update.[354]

Creative Energy proposes that the thermal energy rates and the NEFC System Contribution Charge that result from the consolidated revenue requirement under the Proposed Rate Design be effective January 1, 2022.[355] However, it is amenable to an effective date of January 1, 2023.[356]

Positions of the Parties

Interveners did not have a position with respect to the implementation date of the Proposed Rate Design.

Panel Determination

In Section 3.6, the Panel accepted Creative Energy's proposal to consolidate the revenue requirements of the Core Steam and NEFC systems under the Proposed Rate Design, however, considered that the effective date for

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346 Core Steam System 2021 permanent rates were approved pursuant to BCUC Order G-310-21A. NEFC System 2021 permanent rates were approved pursuant to BCUC Order G-104-21.

349 The FCAC of $12.50/M# (thousand pounds) of steam was approved for the 2020–2021 gas year (BCUC Order G-295-20). This was revised to $15.40/M# of steam, effective November 1, 2021 (BCUC Order G-329-21). Subsequently, the BCUC approved a FCAC rate of $16.50/M# and a FCAC rate rider of $2.00/M#, effective February 1, 2022 through to January 31, 2023 (BCUC Order G-55-22).

350 For customers connected to the hot water distribution network, a conversion factor of 0.347 MWh/M# is applied. Thus the 2021 approved permanent average rate $64.21/MWh = ($22.28/M#) / (0.347 MWh/M#). Reference: Exhibit B-1-1, Appendix B, Interim Tariff Page for Approval.

351 Under the Proposed Rate Design, a single fuel charge rate would remain in effect to recover on a flow-through basis the costs of the bundled natural gas service provided by FEI under Rate 7. The fuel charge rate currently factors the NEFC load into rates, therefore this will not change under the Proposed Rate Design. Reference: Exhibit B-1, Section 5.2.1, p. 31.

352 Creative Energy provides an NEFC System Contribution Charge of $9.50/MWh in the summary table of rates in response to BCUC IR 56.3 (Exhibit B-14), however in the Rate Structure Model filed as an attachment to Creative Energy's response to BCUC IR 56.3 (Exhibit B-14, BCUC IR 56.3, Attachment "Rate Structure Model – BCUC IR 56.3", Tab "RDDA Recovery", Cell C11), Creative Energy calculates an NEFC System Contribution Charge of $9.68/MWh.

353 The Average $/MWh for NEFC is calculated by determining the annual revenues collected for each building customer through NEFC's fixed charge (floor area of each building multiplied by the fixed charge) and variable charge (annual load multiplied by the variable charge). These annual revenues are summed and divided by the forecast annual load of the NEFC system (19,566 MWh). Please refer to Exhibit B-14, Attachment BCUC IR 56.3 for additional details.

354 BCUC Order G-11-22, Exhibit B-12, Table 13, p. 9; Exhibit B-14, BCUC IR 56.3.

355 Exhibit B-1-1, Section 1.4, p. 7.

356 Creative Energy Final Argument, Section 1.3.3, para. 25, p. 7.

implementation should be determined following review of the revenue requirements for each system on a standalone basis. The Panel observes that the Amended Load Forecast for the Core Steam system, which it has accepted, reduces the 2022 indicative rates for both energy systems under the Proposed Rate Design as compared to the energy systems' respective rates approved on an interim basis. For the Core Steam customers, the rate reduction from interim rates to indicative rates under the Proposed Rate Design is not as significant as that under the Existing Rate Design. Based on this, and with the objective to reduce rate volatility attributable to rate design and provide some rate stability for customers, the Panel considers an effective date of January 1, 2022 for the Proposed Rate Design is reasonable. The Panel considers reduced volatility of rates to be consistent with rate design principles and serves the public interest.

The Panel acknowledges that there are several determinations and directions included in the 2022 revenue requirements for the Core Steam and NEFC system that will impact the resulting rates, however, considers that these will not impact the rates to the same extent as the Amended Load Forecast. Based on this, **the Panel approves the Proposed Rate Design to be effective January 1, 2022. Further, the Panel directs Creative Energy to recalculate the thermal energy rates for the Core Steam and NEFC systems and the NEFC System Contribution Charge, effective January 1, 2022, subject to the determinations and directives in this decision, in a compliance filing due to the BCUC within 45 days of the date of this decision.**

Creative Energy is directed to refund to or recover from ratepayers the net difference between the interim thermal energy rates collected from the Core Steam and NEFC customers under the Existing Rate Design and the permanent rates under the Proposed Rate Design, with interest at Creative Energy's cost of debt in the next billing cycle after this decision. Creative Energy is also directed to file with the BCUC, within 45 days of this decision, amended tariff pages reflecting the recalculated thermal energy rates and actual NEFC System Contribution Charge directed above and in accordance with the terms of this decision and the accompanying order.

The Panel considers that Creative Energy's customers should have convenient access to the approved tariff pages that specify the charges for its thermal energy service. Accordingly, **Creative Energy is directed to post the BCUC-endorsed permanent tariff pages on its corporate website within 30 days of the date of endorsement.**

In addition, to assist with comparing the average rates between the Core Steam and NEFC service areas, **the Panel directs Creative Energy to provide in its next RRA, a breakdown of the Core Steam and NEFC rates in a format similar to that provided in response to BCUC IR 56.3, without the NEFC average bill information and expanded to separately report the average thermal energy rate, the fuel charge and the NEFC System Contribution Charge in dollars per megawatt hour for the NEFC system.**

Under the Proposed Rate Design, the tariff pages for the Core Steam system will be amended to reflect unified thermal energy rates for the Core Steam and NEFC systems and include the System Contribution Charge to be recovered separately and only from NEFC customers. Accordingly, **the BCUC consents to Creative Energy rescinding the NEFC Tariff applicable to the NEFC area serviced by Creative Energy, effective January 1, 2022.**

7.0 Other Matters

7.1 CPCN for System Extension

By Order G-339-21, the BCUC established a regulatory timetable for the review of the Application and directed Creative Energy to, among other things, file evidence regarding the need for Creative Energy to obtain a CPCN in order to extend its Core Steam System into NEFC (Directive 2 c.). This directive arose as a result of relevant findings made in the BCUC NEFC CPCN Decision. This section of this decision summarizes these prior BCUC findings and Creative Energy's response to Directive 2 c.

During the 2015 NEFC CPCN proceeding, the BCUC inquired whether it was appropriate to propose the NEFC system be separate from the existing utility (Core Steam system), rather than be considered as an extension of the existing utility, with a separate rate class. In response to this inquiry, Creative Energy stated:[357]

> […] that it does not see any practical difference between considering the NEFC and Chinatown NES as separate from the existing utility or an extension of the existing utility with a separate rate class… Creative Energy states that the NEFC extension is a large neighbourhood addition and not comparable to the addition of a single customer. It submits that the proposal should be evaluated in that context. Creative Energy also notes that it does not have a formal Commission approved system extension test and in its view, its extension policies for the core are not in the scope of this proceeding. Creative Energy submits that if this Project is considered a main extension to the Existing Core a contribution in aid of construction would be necessary for the project to pass a standard main extension.

Regarding the questions whether to pursue approval of the NEFC system (or NEFC district energy system (DES) as referred to in the following quote) as an extension of the existing utility or as a CPCN, the BCUC found that:

> **The Panel finds that Creative Energy cannot extend its existing steam facility into NEFC without a CPCN as Creative Energy does not have a Commission approved extension policy.** In the absence of a Commission approved extension policy, the TES Stream B Extension Guidelines apply to any extension of Creative Energy's existing system. The Guidelines allow extensions without requiring a CPCN, provided the cumulative capital costs of all extensions do not exceed the initial capital costs and rates for existing customers do not increase by an amount greater than 10 percent. **The Panel finds there is not sufficient evidence on the record to establish whether the proposed NEFC DES meets the CPCN exclusion criteria as outlined in the TES Guidelines.**

Further in the 2015 NEFC CPCN Decision, the BCUC also found "that connecting to the Beatty Street plant through two new steam to hot water converter stations, as opposed to using temporary or permanent gas boilers, is an appropriate choice and also notes that it is the applicant's proposed approach."[358] Additionally, the 2015 NEFC CPCN Decision states that the BCUC's scope in granting the CPCN is limited to Phase 1, which consisted of a hot water piping network in NEFC, and did not consider a Phase 2 (i.e. future switch to low-carbon heat generation).[359]

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[357] 2015 NEFC CPCN Decision, Section 4.1.1.2, p. 15.

[358] 2015 NEFC CPCN, Section 4.1.1.3, p. 17.

[359] 2015 NEFC CPCN, Executive Summary, p. (i).

Directive 2 c. of Order G-339-21 directs Creative Energy to file any available evidence regarding the need for a CPCN to extend its Core Steam system into the NEFC. In response, Creative Energy states that the need for a CPCN to extend its Core Steam system into NEFC is not applicable to the present application.[360] Creative Energy further states that the existing NEFC system was built as an extension to the Core steam as was intended and as was approved by the CPCN.

Creative Energy submits that following its initial response to Directive 2 c. of Order G-339-21, there was no further inquiry or discussion regarding this matter in the proceeding, and accordingly considers this line of inquiry to be closed.[361]

Positions of the Parties

Interveners did not make submissions on this matter.

Panel Discussion

In the 2015 NEFC CPCN Decision, the BCUC ultimately granted a CPCN for the first phase of the NEFC system, which included connection to the Core Steam system. The Panel accepts that the NEFC system, as designed, was determined to be both necessary and in the public convenience and Creative Energy constructed the NEFC system based on the 2015 NEFC CPCN as approved by the BCUC. In the Panel's view, the Proposed Rate Design does not alter the physical characteristics of NEFC system and based on this, a CPCN is not required at this time because Creative Energy has already obtained a CPCN to extend the Core Steam system to NEFC.

7.2 Compliance Matters

In this section, the Panel addresses the filing timelines of Creative Energy's next RRA for the Core Steam and NEFC service areas.

7.2.1 Direction on Next Revenue Requirements Application

Creative Energy submits that the Panel's decision will be foundational to the consultation with customers on the expected low-carbon energy services offer(s) and also to the 2023 RRA Creative Energy expects to file by December 1, 2022.[362]

Panel Determination

The Panel observes that 2022 is nearly complete and with consideration to the Proposed Rate Design being effective January 1, 2022, the Panel has concerns regarding the timing of Creative Energy's filing of the next RRA for the Core Steam and NEFC systems on a consolidated basis. Based on this, **Creative Energy is directed to file an evidentiary update to its 2023 RRA for the Core Steam and NEFC systems within 60 days of this decision, addressing the relevant directives and determinations in this decision, as applicable**.

[360] Exhibit B-3, p. 4.

[361] Creative Energy Final Argument, para 11.

[362] Exhibit B-19, p. 2.

8.0 Summary of Directives

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

<table>
<tr><th>#</th><th>Directive</th><th>Page</th></tr>
<tr><td>1</td><td>The Panel approves Creative Energy’s proposal to consolidate the costs of service and unify the rate base and rates for the NEFC system with the Core Steam system.</td><td>18</td></tr>
<tr><td>2</td><td>[T]he Panel finds the proposed System Contribution put forward by Creative Energy in the Application to be reasonable.</td><td>19</td></tr>
<tr><td>3</td><td>[T]he Panel directs Creative Energy to re-calculate the System Contribution, effective January 1, 2022, with a 2022 revenue requirement figure that is adjusted to reflect the directions and determinations in Section 4.2 of this decision.</td><td>19</td></tr>
<tr><td>4</td><td>The Panel approves the transfer of the NEFC Variance Deferral Account balance at December 31, 2021 to the NEFC RDDA and closure of the NEFC Variance Deferral Account.</td><td>19</td></tr>
<tr><td>5</td><td>[T]he Panel approves Creative Energy to charge customers connected to the NEFC system a System Contribution Charge, effective January 1, 2022. The System Contribution Charge will recover the balance of the NEFC RDDA at January 1, 2022, which is comprised of the NEFC System Contribution at January 1, 2022 and the December 31, 2021 balance of NEFC RDDA and the NEFC Variance Deferral Account.</td><td>20</td></tr>
<tr><td>6</td><td>[T]he Panel directs Creative Energy to provide the following in future RRAs:
A revised long-term load forecast for both the Core Steam and NEFC systems for the purposes of re-calculating the NEFC System Contribution Charge and a re-calculated NEFC System Contribution Charge based on the revised long-term load forecasts. If Creative Energy comes forward with a multi-year RRA, the Panel directs Creative Energy to explain how the System Contribution Charge will be addressed should new load connect to the NEFC system during the corresponding test period.
The calculation and annual balance of the components recovered through the System Contribution Charge, including the NEFC System Contribution Charge and the NEFC RDDA net of the NEFC Variance Deferral Account.</td><td>20</td></tr>
<tr><td>7</td><td>As part of the anticipated rate design application supporting low-carbon energy service, and in addition to the BCUC directions included in the Decarbonization Project Decision, the Panel directs Creative Energy to provide a comprehensive proposal that includes analysis of the pros and cons for both the ratepayers and the utility of each of the feasible alternatives considered.</td><td>27</td></tr>
<tr><td>8</td><td>[T]he Panel approves Creative Energy’s proposal to consolidate the costs of service and unify the rate base and rates for the NEFC system with the Core Steam system.</td><td>31</td></tr>
<tr><td>9</td><td>The Panel finds the 2022 forecast revenue requirements for the Core Steam system to be reasonable for the purposes of setting rates in the 2022 Test Year, subject to the directives and determinations on the items addressed in [Section 4.2 of this decision]</td><td>37</td></tr>
<tr><td>10</td><td>The Panel finds the forecast water and electricity costs as amended in the Evidentiary Update provide a reasonable basis for determining the 2022 revenue requirement for the Core Steam</td><td>38</td></tr>
</table>

	system.	
11	The Panel directs Creative Energy to include in its next RRA, a review of its methodology for forecasting water treatment costs which includes a summary of the monitoring data collected and a discussion of how the data informs the forecast methodology.	38–39
12	The Panel approves Creative Energy's proposal to revise the percentage allocation of IT costs between the regulated and non-regulated operations to 64 percent and 36 percent, respectively, to reflect the current distribution of headcount. Further, the Panel finds that the resulting 2022 forecast IT costs for the system upgrades are reasonable, subject to the directives and determinations in this decision, specifically related to the Massachusetts's Formula.	40
13	The Panel directs Creative Energy to re-calculate the 2022 forecast cost of the extended health benefits using the actual monthly average of $373 per month per employee in a compliance filing due to the BCUC within 45 days of the date of this decision.	41
14	The Panel directs Creative Energy to correct the misallocation of the $30,000 for external assessments of customer connection opportunities in a compliance filing to the BCUC within 45 days of the date of this decision.	42
15	The Panel approves Creative Energy to remove the cost of fuel from the NEFC operating revenues for the purposes of determining the allocation percentages for the Massachusetts Formula.	44
16	[T]he Panel approves Creative Energy's proposal to allocate overtime costs using the Massachusetts Formula.	44
17	Creative Energy is directed to re-calculate the allocation percentages for the Massachusetts Formula and the costs allocated to the Core Steam and NEFC systems in a compliance filing due to the BCUC within 45 days of the date of this decision.	44
18	the Panel directs Creative Energy to provide in future RRAs, the total gross costs for Creative Energy Vancouver Platforms Inc., including a breakdown of all costs allocated to each of its TES and any other entities, and to identify whether the cost is directly assigned or allocated via the Massachusetts Formula.	44
19	[W]ith regard to the directive in Order G-349-21 for Creative Energy to address the appropriate allocation of property taxes in its next RRA, the panel finds that Creative Energy has not satisfied this directive. Therefore, the Panel directs Creative Energy to provide an update on the allocation of property taxes as part of its next RRA and to provide the cost allocation at the time the developer begins using the regulated space.	45
20	The Panel approves Creative Energy's proposed 4.5 percent cost of debt for the 2022 Test Year for the Core Steam and NEFC systems.	46
21	The Panel finds the forecast capital expenditures of approximately $3.03 million in 2022 to be reasonable.	47
22	The Panel approves Creative Energy's proposal to establish a WCDA on an ongoing basis accruing interest at Creative Energy's short-term debt rate and to record the variance between forecast and actual water costs with the balance to be amortized over a one-year period.	48
23	The Panel finds the recovery of the refinancing costs amortized in 2021 and allocated to the Core Steam and NEFC systems would constitute retroactive ratemaking and therefore recovery	50

	thereof is denied.	
24	Creative Energy is directed to provide the amount of refinancing costs amortized in 2021 and allocated to the Core Steam and NEFC systems in a compliance filing due to the BCUC within 45 days of the date of this decision, and to exclude these amounts from the final, permanent rates, effective January 1, 2022.	50
25	[T]he Panel approves for Creative Energy to establish a RCDA, accruing interest at Creative Energy's weighted average cost of debt, to record the refinancing costs incurred to renew its existing credit facility with HSBC and TD on September 15, 2021 and allocated to the Core Steam and NEFC systems, net of any refinancing costs amortized in 2021.	50
26	Creative Energy is directed to provide the amount of refinancing costs incurred to renew its existing credit facility with HSBC and TD on September 15, 2021 and allocated to the Core Steam and NEFC systems, net of any refinancing costs amortized in 2021, in a compliance filing due to the BCUC within 45 days of the date of this decision. The balance of the RCDA is to be amortized over a period of two years, commencing January 1, 2022.	51
27	[T]he Panel denies Creative Energy's request to maintain the RCDA on an ongoing basis.	51
28	The Panel approves the continuance of the COVID-19 Deferral Account for the 2022 Test Year to capture: a. Any incremental, unplanned expenses and cost savings related to the COVID-19 pandemic that Creative Energy has incurred related to continuing safe and reliable operations, including any incremental financing cost; b. Any unrecoverable revenues (bad debt) resulting from customers that do not pay their bills due to the impacts of COVID-19 on their financial circumstances; and **c.** The variance between the 2022 approved steam load forecast and the actual steam load.	53
29	[T]he Panel directs Creative Energy to include with its next RRA: (i) a proposal to close the COVID-19 Deferral Account, including the disposition of the existing balance; and (ii) a proposal to establish a new load variance deferral account, including the following: (i) The factors that contribute to variances between forecast and actual loads that would be appropriate to include in the deferral account; (ii) The proposed interest rate; and (iii) Proposed amortization period.	53–54
30	The Panel finds the 2022 forecast revenue requirements for the NEFC system to be reasonable for the purposes of setting rates in the 2022 Test Year, subject to the directives and determinations in this decision.	56
31	The Panel approves Creative Energy to record in the NEFC Variance Deferral Account the 2021 additions of $205,105.	58
32	[T]he Panel directs Creative Energy to close the NEFC COVID-19 Deferral Account and cease	58

	reporting at the end of 2022	
33	[T]he Panel approves the Proposed Rate Design to be effective January 1, 2022.	60
34	[T]he Panel directs Creative Energy to recalculate the thermal energy rates for the Core Steam and NEFC systems and the NEFC System Contribution Charge, effective January 1, 2022, subject to the determinations and directives in this decision, in a compliance filing due to the BCUC within 45 days of the date of this decision.	60
35	Creative Energy is directed to refund to or recover from ratepayers the net difference between the interim thermal energy rates collected from the Core Steam and NEFC customers under the Existing Rate Design and the permanent rates under the Proposed Rate Design, with interest at Creative Energy's cost of debt in the next billing cycle after this decision.	60
36	Creative Energy is also directed to file with the BCUC, within 45 days of this decision, amended tariff pages reflecting the recalculated thermal energy rates and actual NEFC System Contribution Charge directed above and in accordance with the terms of this decision and the accompanying order.	60
37	Creative Energy is directed to post the BCUC-endorsed permanent tariff pages on its corporate website within 30 days of the date of endorsement.	60–61
38	the Panel directs Creative Energy to provide in its next RRA, a breakdown of the Core Steam and NEFC rates in a format similar to that provided in response to BCUC IR 56.3, without the NEFC average bill information and expanded to separately report the average thermal energy rate, the fuel charge and the NEFC System Contribution Charge in dollars per megawatt hour for the NEFC system.	61
39	[T]he BCUC consents to Creative Energy rescinding the NEFC Tariff applicable to the NEFC area serviced by Creative Energy, effective January 1, 2022.	61
40	Creative Energy is directed to file an evidentiary update to its 2023 RRA for the Core Steam and NEFC systems within 60 days of this decision, addressing the relevant directives and determinations in this decision, as applicable.	63

DATED at the City of Vancouver, in the Province of British Columbia, this 16th day of March 2023.

Original signed by:

____

T. A. Loski
Panel Chair / Commissioner

Original signed by:

____

A. C. Dennier

Commissioner

Original signed by:

A. Pape-Salmon
Commissioner

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ORDER NUMBER
G-345-22A

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

and

Creative Energy Vancouver Platforms Inc.
Application for Rates for the Core Steam System and Northeast False Creek Service Areas

BEFORE:
T. A. Loski, Panel Chair
A. C. Dennier, Commissioner
A. Pape-Salmon, Commissioner

on November 29, 2022

ORDER

WHEREAS:

A. On November 1, 2021, Creative Energy Vancouver Platforms Inc. (Creative Energy) filed with the British Columbia Utilities Commission (BCUC) part one of its application for approval of rates for the core steam (Core Steam) and Northeast False Creek (NEFC) service areas, which addresses rate design (Application Part One). Specifically, Creative Energy proposes to consolidate the cost of service and rates of the NEFC service area with the Core Steam system, effective January 1, 2022, and charge customers connected to the NEFC system the same rates as customers connected to the Core Steam system, plus a system contribution charge (System Contribution Charge) (Proposed Rate Design);

B. On December 1, 2021, Creative Energy filed the following, among other things:

   1. The 2022 revenue requirements for the Core Steam System and NEFC service areas based on the Proposed Rate Design (Application Part Two), which requests approval of interim and permanent rates, effective January 1, 2022 (Application Part One and Part Two are collectively referred to as the Application); and

   2. The 2022 revenue requirements and resulting rates, effective January 1, 2022, for each of the Core Steam system and NEFC service areas under the respective existing rate designs;

C. By letter dated April 21, 2022, Creative Energy filed, among other items, an evidentiary update and errata to the Application, amending its request for permanent approval of thermal energy rates, effective January 1, 2022;

D. By Orders G-11-22, G-104-22, G-115-22, G-176-22 and G-211-22, the BCUC established regulatory timetables for the review of the Application, which provided for, among other items, notice of Application, dates for intervener registration, BCUC and intervener information requests (IR) No. 1 and 2, Creative Energy's responses to IRs, and written final and reply arguments;

E. The Commercial Energy Consumers Association of British Columbia and Residential Consumer Intervener Association registered as interveners in the proceeding to review the Application; and

F. 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 provided in the decision issued concurrently with this order, the BCUC orders as follows:

1. Creative Energy is approved to consolidate the cost of service and unify the rate base and rates for the NEFC system with the Core Steam system under the Proposed Rate Design, effective January 1, 2022.

2. Creative Energy is approved, on a permanent basis, effective January 1, 2022, to charge customers connected to each the Core Steam and NEFC systems the same thermal energy rates under the existing declining block rate structure for the Core Steam system, plus a System Contribution Charge to customers connected to the NEFC system, as set out in Appendix B to Exhibit B-1-1, subject to the directives and determinations outlined in this order and the decision issued concurrently.

3. Creative Energy is approved to:

    a. Transfer NEFC's Variance Deferral Account balance to NEFC's Revenue Deficiency Deferral Account (NEFC RDDA) and to close the NEFC's Variance Deferral Account, effective December 31, 2021; and

    b. To add the system contribution calculated as part of the system extension test to the NEFC RDDA, effective January 1, 2022.

4. Creative Energy is approved to establish a Water Cost Deferral Account on an ongoing basis accruing interest at Creative Energy's short-term debt rate and to record the variance between forecast and actual water costs with the balance to be amortized over a one-year period.

5. Creative Energy is approved to establish a Refinancing Cost Deferral Account (RCDA), accruing interest at Creative Energy's weighed average cost of debt, to record the refinancing costs incurred to renew its existing credit facility with HSBC and TD on September 15, 2021 and allocated to the Core Steam and NEFC systems, net of any refinancing costs amortized in 2021.

6. Creative Energy is denied recovery of the refinancing costs amortized in 2021 and allocated to the Core Steam and NEFC systems.

7. Creative Energy is denied its request to maintain the RCDA on an ongoing basis.

8. Creative Energy is approved to continue to use the COVID-19 Deferral Account for the Core Steam system for the 2022 Test Year to capture:

    a. Any incremental, unplanned expenses and cost savings related to the COVID-19 pandemic that Creative Energy has incurred related to continuing safe and reliable operations, including any incremental financing cost;

b. Any unrecoverable revenues (bad debt) resulting from customers that do not pay their bills due to the impacts of COVID-19 on their financial circumstances; and

c. The variance between the 2022 approved steam load forecast and the actual steam load.

9. Creative Energy is approved to record the 2021 additions of $205,105 in the NEFC Variance Deferral Account.

10. Creative Energy is directed to close the COVID-19 Deferral Account for the NEFC system and cease reporting at the end of 2022.

11. Creative Energy is directed to re-calculate its revenue requirements and rates for the Core Steam and NEFC systems, effective January 1, 2022, subject to the adjustments resulting from the directives and determinations contained in this order and the decision issued concurrently, and to file revised financial schedules and revised tariff pages with the BCUC for endorsement within 45 days of the date of this order and the decision issued concurrently.

12. Creative Energy is directed to refund to or recover from ratepayers the net difference between the interim thermal energy rates collected from the Core Steam and NEFC customers under the Existing Rate Design and the permanent rates under the Proposed Rate Design with interest at Creative Energy's cost of debt in the next billing cycle after this decision, as set out in Section 6.0 of the decision issued concurrently with this order.

13. The BCUC consents to rescinding the NEFC Tariff applicable to the NEFC area serviced by Creative Energy, effective January 1, 2022.

14. Creative Energy must inform its customers of the Core Steam and NEFC systems of the rate design changes and resulting permanent rates by way of written notice to be included with their next customer invoice after Creative Energy's compliance filing for the Core Steam and NEFC systems has been accepted by the BCUC.

15. Creative Energy is directed to file an evidentiary update to its 2023 revenue requirements application for the Core Steam and NEFC systems within 60 days of the date of this order, addressing the relevant directives and determinations in the decision issued concurrently, as applicable.

16. Creative Energy 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 16th day of March 2023.

BY ORDER

Original signed by:

T. A. Loski
Commissioner

Glossary of Terms

Acronym	Description
$	Dollar (Canadian Currency)
2015 NEFC CPCN	Creative Energy's Application for a CPN for a Low Carbon Neighbourhood Energy System for Northeast False Creek and Chinatown Neighbourhoods of Vancouver
2016–2017 NEFC RRA RDA	Creative Energy's 2016–2017 Revenue Requirements Application and Rate Design for NEFC Hot Water Service
2019–2020 Core and NEFC RRA	Creative Energy's 2019–2020 RRA for the Core Steam system and NEFC Service Areas
Application	Application Part One and Application Part Two
Application Part One	Creative Energy's Application for Rates for the Core Steam system and Northeast False Creek (NEFC) service areas: Part 1 – Rate Structure
Application Part Two	Creative Energy's Application for Rates for the Core Steam system and NEFC service areas: Part 2 – Consolidated 2022 Revenue Requirements for Unified Rates
BCUC	British Columbia Utilities Commission
SET Guidelines	BCUC's Utility System Extension Test Guidelines dated September 5, 1996
The CEC	Commercial Energy Consumers Association of British Columbia
CEDLP	Creative Energy Development Ltd.
Core Steam	core steam
Core Steam Plant	The Core Steam system's centralized natural gas boiler plant
CPCN	Certificate of Public Convenience and Necessity
Creative Energy	Creative Energy Vancouver Platforms Inc.
Existing Rate Design	The existing rate designs for the Core Steam and NEFC systems
FCAC	Fuel Cost Adjustment Charge
InstarAGF	InstarAGF Essential Infrastructure Fund
IT	Information Technology
m2	Square metres
M#	Thousand pounds of steam
MWh	Megawatt hours
NEFC	Northeast False Creek
NEFC COVID-19 Deferral Account	COVID-19 Deferral Account for the NEFC system
NEFC RDDA	NEFC Revenue Deficiency Deferral Account

NEFC System Contribution Charge	A charge to recover the balance in the NEFC RDDA net of the NEFC Variance Deferral Account as at the end of 2021 plus the System Contribution calculated as at January 1, 2022. The charge is recovered separately and only from NEFC customers.
NEA	Neighbourhood Energy Agreement
NES	Neighbourhood energy system
Proposed Rate Design	Consolidation of the revenue requirements and unification of the rate base and rates for the NEFC system with the Core Steam system
RCIA	Residential Consumer Intervenor Association
RRA	Revenue Requirements Application
System Contribution	The net present value of the incremental forecast cost to serve the NEFC building customers over the period 2022–2043 less the net present value of the incremental benefit to the Core Steam system of the extension to serve NEFC building over the same period
TES	Thermal energy system
Unified Rates	Rates common to both the Core Steam and NEFC systems
WCDA	Water Cost Deferral Account
Westbank	Westbank Holdings

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

and

Creative Energy Vancouver Platforms Inc.
Rates for Core Steam System and Northeast False Creek Service Areas

EXHIBIT LIST

Exhibit No.	Description
COMMISSION DOCUMENTS	
A-1	Letter dated November 19, 2021 – Appointing the Panel for the review of Creative Energy Vancouver Platforms Inc. Rates for Core Steam System and Northeast False Creek Service Areas
A-2	Letter dated November 19, 2021 – BCUC Order G-339-21 establishing a regulatory timetable with Reasons
A-3	Letter dated January 14, 2022 – BCUC Order G-11-22 establishing a regulatory timetable with Reasons
A-4	Letter dated February 24, 2022 – BCUC Information Request No. 1 to Creative Energy
A-5	Letter dated April 20, 2022 – BCUC Order G-104-22 establishing a regulatory timetable with Reasons for Decision
A-6	Letter dated April 22, 2022 – BCUC Order G-107-22 adjourning the regulatory timetable
A-7	Letter dated April 29, 2022 – BCUC Order G-115-22 amending the regulatory timetable
A-8	Letter dated May 27, 2022 – BCUC Information Request No. 2 to Creative Energy
A-9	Letter dated June 28, 2022 – BCUC Order G-176-22 amending the regulatory timetable and requesting submissions on further process
A-10	Letter dated July 27, 2022 – BCUC Order G-211-22 establishing a further regulatory timetable

APPLICANT DOCUMENTS

B-1	**CREATIVE ENERGY VANCOUVER PLATFORMS INC. (CREATIVE ENERGY)** - Rates for Core Steam System and Northeast False Creek (NEFC) Service Areas, Part 1 – Rate Structure dated November 1, 2021
B-1-1	Letter dated December 1, 2021 – Creative Energy submitting Part 2 – Consolidated 2022 Revenue Requirements for Unified Rates
B-2	Letter dated December 1, 2021 – Creative Energy submitting response to Order G-339-21 Directive 2b
B-3	Letter dated December 1, 2021 – Creative Energy submitting response to Order G-339-21 Directive 2c
B-4	Letter dated December 8, 2021 – Creative Energy response to Order G-339-21 Appendix D request for submissions
B-5	Letter dated December 8, 2021 – Creative Energy response to Order G-339-21 Directives
B-6	Letter dated December 17, 2021 – Creative Energy submitting Capital Additions Details
B-7	Letter dated December 17, 2021 – Creative Energy submitting COVID-19 Deferral Account proposed recovery
B-7-1	Letter dated February 9, 2021 – Creative Energy submitting errata to the supporting Excel attachment and update to the COVID-19 Deferral Account
B-8	Letter dated December 22, 2021 - Creative Energy Reply Submission on Items Outlined in Appendix D
B-9	Letter dated March 31, 2022 – Creative Energy submitting RCIA Information Request No. 1
B-10	Letter dated March 31, 2022 – Creative Energy submitting response to CEC Information Request No. 1
B-11	Letter dated March 31, 2022 – Creative Energy submitting response to BCUC Information Request No. 1
B-12	Letter dated April 21, 2022 – Creative Energy submitting Evidentiary Update and Errata

B-13	Letter dated April 28, 2022 – Creative Energy submitting Customer Engagement Update
B-14	Letter dated June 15, 2022 – Creative Energy submitting response to BCUC Information Request No. 2
B-15	Letter dated June 15, 2022 – Creative Energy submitting response to CEC Information Request No. 2
B-16	Letter dated June 15, 2022 – Creative Energy submitting response to RCIA Information Request No. 2
B-17	Letter dated June 15, 2022 – Creative Energy submitting Engagement and Consultation Activities G-115-22 Compliance
B-18	Letter dated July 7, 2022 – Creative Energy submission on further process
B-19	Letter dated July 15, 2022 – Creative Energy reply submission on further process

INTERVENER DOCUMENTS

C1-1	**COMMERCIAL ENERGY CONSUMERS ASSOCIATION OF BRITISH COLUMBIA (CEC)** - Letter dated December 13, 2021 Request to Intervene by David Craig
C1-2	Letter dated December 15, 2021 – CEC submitting comments regarding Order G-339-21 Appendix D
C1-3	Letter dated March 3, 2022 – CEC submitting Information Request No. 1 to Creative Energy
C1-4	Letter dated May 27, 2022 – CEC submitting Information Request No. 2 to Creative Energy
C1-5	Letter dated July 14, 2022 – CEC submission on further process
C2-1	**RESIDENTIAL CONSUMER INTERVENER ASSOCIATION (RCIA)** – Letter dated December 13, 2021 submitting request to intervener by Matthew Matsuiak
C2-2	Letter dated December 15, 2021 – RCIA submitting comments regarding Order G-339-21 Appendix D
C2-3	Letter dated March 3, 2022 – RCIA submitting Information Request No. 1 to Creative Energy
C2-4	Letter dated May 26, 2022 – RCIA submitting Information Request No. 2 to Creative Energy
C2-5	Letter dated July 13, 2022 – RCIA submission on further process