

12 March 2021

Via E-filing

Mr. Patrick Wruck
Acting Commission Secretary
BC Utilities Commission
Suite 410, 900 Howe Street
Vancouver, BC V6Z 2N3

Dear Mr. Wruck:

**Re: British Columbia Utilities Commission (BCUC, Commission)
Creative Energy Vancouver Platforms Inc. (Creative Energy)
Application for Heating Rates for the Heating Thermal Energy System and Cooling Rates for
the District Cooling System at the Vancouver House Development – Project No. 1599048**

Creative Energy writes to submit its Final Argument in the above noted proceeding.

For further information, please contact the undersigned.

Sincerely,



Rob Gorter
Director, Regulatory Affairs and Customer Relations

Enclosure.

British Columbia Utilities Commission
Creative Energy Vancouver Platforms Inc.

Application for Heating Rates for the Heating Thermal Energy
System and Cooling Rates for the District Cooling System at the
Vancouver House Development

Creative Energy Vancouver Platforms Inc.

Final Argument

March 12, 2021

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1 Introduction

1.1 Application and Review Process

1. On October 2, 2019, Creative Energy filed an application for the approval of interim rates, terms and conditions of service, and a Revenue Deficiency Deferral Account (**RDDA**) effective November 1, 2019, for its provision of thermal energy service for heating at the Vancouver House Development (**Development**) in the South Downtown area of Vancouver (**Application for Heating Rates** in respect of the service provided by **the Heating TES**).
2. By Order G-260-19 the BCUC approved on an interim and refundable basis Creative Energy's proposed rate design and interim rates. The RDDA was approved as proposed. A Customer Service Agreement (**CSA**) was approved on an interim basis without the addition of the Assignment provision as set out in section 3 of the proposed CSA attached to the Application for Heating Rates. By Order G-264-19, the Commission established a regulatory process to review the Application for Heating Rates, providing for notice and intervention into the application and one round of information requests (**IRs**).
3. Following the receipt of Creative Energy's responses to IR 1, by Order G-9-20 the Commission adjourned the proceeding into the Application for Heating Rates until July 31, 2020 to allow Creative Energy to provide a final detailed accounting and verification of the costs of the Heating TES to support the Commission's review and approval of final rates for the Heating TES (a **Final Cost Report**). The Commission directed Creative Energy to file an evidentiary update in support of an application for multi-year permanent rates by July 31, 2020. By letter dated July 31, 2020, the Commission granted Creative Energy an extension to the evidentiary update and application for permanent rates filing date to August 31, 2020.
4. On August 27, 2020, in accordance with Commission Order G-9-20, Creative Energy submitted an **Evidentiary Update** to the Heating Rates Application to request permanent approval of heating rates for the period 2020 through 2023.
5. In support of the Application and in accordance with Order C-1-19, Creative Energy attached its Final Cost Report into the Heating TES at Appendix A to the Evidentiary Update.
6. On August 11, 2020 Creative Energy applied to the Commission for interim and permanent approval of rates for the five-year period September 2020 through December 2025 for its provision of district cooling service to the Vancouver House Development (**DCS Rates Application** in respect of the service provided by the **Cooling DCS**).
7. By Order G-225-20 the Commission approved on an interim and refundable basis Creative Energy's proposed rate design and interim rates for the Cooling DCS. The RDDA was approved as proposed. A CSA, identical to the CSA that was approved by Order G-260-19, was approved effective the date of completion of the transaction for Creative Energy to purchase the DCS, which transaction closed on November 23, 2020.
8. By Order G-233-20 the Commission established a written hearing process to jointly review the Heating Rates Application and DCS Rates Application in view of common and shared attributes,

evidence and principles supporting the cost of service and rate design proposals across the two applications.¹

9. The BC Old Age Pensioners Organization *et al.* (**BCOAPO**) and the Commercial Energy Consumers Association of BC (**CEC**) participated as interveners in the proceeding.

1.2 Summary of Requested Approvals

10. Creative Energy requests the following permanent approvals for the Heating TES, pursuant to sections 58 to 60 of the Act:
 - The Levelized Capacity Charge rate design and the charges per kilowatt (**kW**) of design peak heating demand established upon that basis as set forth in Appendix C of the Evidentiary Update for the periods 2020, 2021, 2022 and 2023;
 - The Variable Charge rate design and the determination of the variable charges as set forth in Appendix C of the Evidentiary Update; namely, a variable Charge per megawatt hour (**MWh**) for all megawatt hours supplied during a month and calculated each month equal to total monthly fuel costs of the Heating TES for natural gas and electricity (in \$) divided by the total metered energy supplied by the Heating TES to the customers during the month (in MWh);
 - The CSA at Appendix D of the Evidentiary Update; and
 - The Regulatory Cost Deferral Account (**RCVDA**) as described in section 4.4 of the Evidentiary Update.
11. Creative Energy requests the following permanent approvals for the Cooling TES, pursuant to sections 58 to 60 of the Act:
 - The Levelized Capacity Charge rate design and the charges per kW of design peak cooling demand established upon that basis as set forth in Appendix B-2 of the DCS Rates Application for the periods September 1, 2020 to December 31, 2020, 2021, 2022, 2023, 2024 and 2025;
 - The Variable Charge rate design and the determination of the variable charges as set forth in Appendix B-2 of the DCS Rates Application; namely, a variable Charge per MWh for all megawatt hours supplied during a month and calculated each month equal to total monthly electricity and water costs (in \$) divided by the total metered energy supplied by the Cooling DCS to the customers during the month (in MWh);
 - The CSA at Appendix C of the DCS Rates Application; and
 - The RCVDA as described in section 1.1 of the Evidentiary Update.

¹ Refer to Table 1 of the DCS Rates Application.

1.3 Statutory Regime

12. The BCUC is continued under Part 1 of the *Utilities Commission Act*, R.S.B.C. 1996, c. 473, as amended (the **UCA**). Part 2 of the *UCA* empowers the BCUC to manage its own affairs including, for example, the engagement of employees and consultants, and the organization of the BCUC into divisions (or Panels) of Commissioners. Part 3 of the *UCA* - "Regulation of Public Utilities" - sets out the regulatory powers of the BCUC in regard to public utilities as well as imposing obligations on public utilities directly. Generally, the BCUC has jurisdiction to determine levels of service, and rates, while public utilities are required to actually provide the service and manage the utility business within such parameters determined by the BCUC.
13. Sections 58-60 of the *UCA* prescribe the BCUC's powers to set rates and the matters the BCUC is to consider when setting rates, which provisions are engaged in relation to this Application. In particular, the BCUC's role in regard to this Application is to determine the just, reasonable and sufficient rates to be observed and in force (s. 58(1)) and to, by order, set the rates (s. 58(2)). Section 60 of the *UCA* specifies the matters the BCUC is to consider and have due regard to in setting the rate. Section 59 sets out the circumstances in which a rate is deemed to be "unjust" or "unreasonable" – in the context of revenue requirements a rate is unjust or unreasonable if the rate is:
 - insufficient to yield a fair and reasonable compensation for the service provided by the utility, or
 - more than a fair and reasonable charge for service of the nature and quality provided by the utility.
14. Put as succinctly as possible, perhaps, the rate must be sufficient and not excessive.
15. The steps to determine and set the rates involves determination of the cost of service for each of the Heating TES and Cooling DCS and also the rate design put in place to recovery the cost of service.

1.4 Rate-Setting Context

1.4.1 Project Completion

16. The South Downtown Heating TES and the South Downtown Cooling DCS are complete,² in-service and operating properly. Each of the projects has been successfully completed and is supplying heat/cooling, as applicable, to the customer(s) as intended in accordance with design specifications. The projects were completed on schedule in accordance with the Developer's construction timelines as such timelines were revised through the course of construction.

² Noting, however, that at this time heating is produced by a temporary containerized boiler plant referred to as the Temporary Energy Centre (TEC).

17. The Heating TES was constructed by Creative Energy. The Cooling DCS was constructed by the Developer and then transferred to Creative Energy upon achieving in-service with all major deficiencies remedied, pursuant to a Construction and Purchase Agreement.
18. The total capital and development costs of the South Downtown Heating TES and of the South Downtown Cooling DCS to be recovered through the applied-for rates are:
 - \$3,758,882 for the Heating TES as presented in Table 2, page 8, of Exhibit B-5³; and
 - \$2,701,614 for the Cooling TES as presented in Table 2, page 6, of Exhibit B-6.

1.4.2 Reliable, Cost-Effective and Competitive Service

19. The Heating TES and Cooling DCS are relatively small Stream B TES utilities with an annual cost of service during the current rate-setting periods in the range of \$565,000 and \$430,000, respectively.
20. It is incumbent on Creative Energy to own, operate and maintain each system to provide safe and reliable service to the customers and to charge customers the rates for service approved by the Commission as just and reasonable.
21. The customers of the two systems are the owners of the buildings served. The materiality of ensuring cost-competitive rates for service was established at the point that the Owner/Developer decided how to heat and cool the buildings. Creative Energy was able to offer an attractive nature and quality of service at competitive rates and secured contracts with the Owner/Developer who decided how to heat or cool its buildings. Creative Energy will operate the system in an optimal manner to serve customer demand.
22. Each utility currently serves the same two customers – (1) the Strata Corporation in control of the residential tower, and (2) the owner of the Vancouver House Development in control of the other 3 buildings.
23. Creative Energy communicated its indicative cost of service, proposed rate design and indicative rates with the Owner/ Developer – future customer – at the time that it was in control of all four buildings at the Development (that is, prior to the assignment of the CSA to the Strata corporation). The customer expressed no concerns. All billing elements are transparent to, understandable and verifiable by the customers.
24. Moreover, under the proposed rates and rate design, Creative Energy has no cause to operate the systems other than optimally, for example at higher or lower than needed temperatures, or otherwise reduce the efficiency of the systems, to the detriment of the customer service and cost.

³ An estimate of road restoration costs in the amount of \$100,000 is factored into the total of the capital and development costs of the Heating TES. We provide the following update that actual road restoration costs have now been invoiced by the City of Vancouver to Creative Energy in the amount of \$57,381. The City transferred some of the costs to the Developer.

1.4.3 Rate-Setting Periods and Future Regulatory Oversight

25. Creative Energy's proposed rate design and application for approval of rates for a four-year period for the Heating TES and a five-year period for the Cooling DCS is a simple, easy to administer approach that provides fair, stable and predictable rates, and that supports regulatory efficiency. There are no inherent concerns about rate shock.
26. Creative Energy will make periodic rate-setting filings over the course of the proposed 30-year levelization period for the rates of each system as necessary based on economic or other material factors or change in circumstance.
27. The expectation is that such rate-setting filings will be less frequent under the proposed 30-year levelization period, than may otherwise be necessary if rates are set on a cost-of-service test year basis. The costs of more frequent rates applications would be out of scale to the small district energy utilities we have here.

1.5 Matters that are not an issue in this proceeding

1.5.1 Temporary Boiler Plant

28. Order C-1-19 directs Creative Energy to file a CPCN application in respect of the anticipated move of the temporary containerized boiler plant of the Heating TES to a permanent location or change to heating resource by the end of 2023.
29. Creative Energy anticipates that the permanent solution will entail some change to the underlying costs and required rates, thereby requiring a future rates application for the period beginning 2024.
30. The future permanent solution to replace the temporary boiler plant of the Heating TES has no bearing on the approvals requested in this Application.

1.5.2 Registration of Heating TES Extension

31. Creative Energy has applied for a CPCN for an extension to the Heating TES to serve a fifth building at 889 Pacific Street. The extension consists of an energy transfer station and distribution piping in the 700 and 800 blocks of Pacific Street.
32. The CPCN application for the extension is being considered separately by a Commission Panel established for that purpose and a decision into the granting of a CPCN for the extension is pending.
33. A set of Panel IRs and further inquiry by Commission staff sought to review considerations into future rate-setting in respect of the extension, but such consideration have no bearing on the requested approvals before this Panel at this time.

1.5.3 Benchmark Rates

34. Creative Energy makes its proposals directly on their own merits and within the context specifically of the nature and quality and cost drivers of the TES and DCS services to which the rates will apply.
35. Comparisons of one utility's proposed component cost to a comparable component cost of other utilities' revenue requirements may be of value in assessing whether the cost item of the utility at issue is reasonable. For example, the Commission will determine a deemed capital structure and allowed ROE for a utility by comparing the risks of the utility to the "benchmark" utility and potentially comparable utilities. Comparison of other cost items such as debt interest rate, capitalized overhead rate, year-over-year increase in employee compensation, etc. can be of value in assessing whether certain costs/assumptions of the utility at issue are reasonable.
36. Creative Energy does, however, submit that comparisons to other utilities' rates (as opposed to component costs of revenue requirements) – as have been reviewed during this proceeding – are not useful when assessing whether proposed rates are just and reasonable. Creative Energy stresses that these sorts of comparisons are of no value in setting a utility's cost of service rates for the nature and quality of services provided.⁴

⁴ Commission Order G-36-21 Decision, section 4.2.1, page 27.

2 Areas of Interest in the proceeding and Synopsis of Argument

37. The Commission and the participating interveners submitted IRs on a wide range of topics. We do not propose, as part of this Final Argument, to review all aspects of its Application or restate the evidence. Instead, Creative Energy uses this Final Argument to comment on certain themes that developed in the IR process which either appear to be of particular interest to the Commission and the participating interveners or which we believe should be highlighted to the Commission Panel.

2.1 Cost of Service

38. The capital and development and overall cost of service of the Heating TES and Cooling DCS are separate and were largely reviewed on a stand-alone basis, noting that certain operating cost input assumptions were similar and reviewed together.

39. The matter of the review of the final costs of the Heating TES (and not the Cooling DCS) was a significant area of interest during the proceeding and is addressed in this argument in Section 3.

- Synopsis - Creative Energy has confirmed that the Heating TES project was prudently managed and our further reporting into the final capital and development costs of the Heating TES reinforces the overall demonstration that there were no material issues with project management and delivery.

40. The matter of the review of the final costs of the Cooling DCS sought clarity and confirmation into the DCS purchase price as set out in the Construction and Purchase Agreement (\$2.53 million), which was reviewed in the proceeding established in respect of the Vancouver House DCS CPCN Application, approved by Order C-2-20.

- The total capital and development costs of the Cooling DCS for recovery in the applied-for rates are therefore the \$2.53 million purchase price plus Creative Energy's development costs of \$171,614. The developments costs are detailed in the Application for Cooling Rates and in the responses to BCUC IRs 25.2 and Series 71.0 for example.
- The Cooling DCS was constructed by the Developer. The Developer assumed the risk of any construction costs over and above the DCS purchase price. Creative Energy was not required to compensate the Developer for any construction costs in excess the DCS purchase price.
- Pursuant to the Construction and Purchase Agreement between Creative Energy and the Developer, the Developer constructed the Cooling DCS, commissioned it, and remedied the major deficiencies to Creative Energy's satisfaction before the equipment was transferred to Creative Energy effective as of November 23, 2020. Remaining minor deficiencies are being remedied to Creative Energy's satisfaction at the Developer's cost.
- Synopsis – Any ostensible issues that arose in this proceeding in relation to the capital and development costs of the Cooling DCS have been satisfied for the purpose of cost recovery.

41. The inquiry in the proceeding into inputs and assumptions into and the total forecast amount of operating costs – as separate from the rate design considerations into the recovery of such costs – were largely of a clarifying nature.
- Synopsis - No ostensible issues were raised in relation to the forecast of operating costs. The input assumptions, forecast amounts, and related considerations into maintenance, operators, insurance, cooling plant lease payments, municipal fees, financing fees, administration and overhead allocations, regulatory costs, income tax, depreciation and cost of capital are fully established and satisfied for the purpose of the forecast recovery of those costs in rates.

2.2 Rate Design

42. The proposed rate design consists of a fixed capacity charge with billing determinants set in relation to each buildings peak design capacity for heating and cooling service in kW, a variable fuel cost flow-through charge recovered per MWh in regard to the energy consumption of each building and a RDDA that supports the levelization of the capacity charge over a 30-year period.
- The rates for all variable fuel costs are externally set and the volumes of fuel consumed are driven directly by variable heating and cooling energy usage. Creative Energy does not control or manage either of these factors and accordingly we propose a variable charge to flow-through these expenses on an actual as-incurred basis based on energy consumption in MWh.
43. The proposed rate design:
- Is a simple approach that aligns cost recovery with cost causation under practical and verifiable billing determinants fairly allocated and assigned to the customers;
 - Offers an easy to administer and ongoing framework for rate-setting and cost recovery appropriate for the small size of the two utilities; and
 - Supports stable, predictable and competitive rates that are understood and accepted by our customers.
44. The following notable areas of interest are addressed in argument in section 4 in relation to key rate design objectives:
- Cost causation and the allocation of fixed versus variable costs to each rate design component;
 - The length of the levelization period and the impact and performance of rates over time; and
 - The mechanism of the RDDA and the compatible incentive to provide reliable, cost-effective service.

2.3 Deferral Mechanisms

45. The approved RDDA is an accepted and established means to allow for a levelized rate structure.⁵ In general, levelized rates are considered advantageous for district energy utilities because such rate design supports those rate design principles that favour lower rates initially and smooth and predictable rate increases over time. This is notwithstanding the annual cost of service of a district energy utility will often be higher in the initial years when the capital costs are incurred to construct the system and decline over time as the assets depreciate.
- Synopsis – The approved RDDA will not record variances between actual and forecast cost of service during the rate-setting period. The RDDA allows for a levelized rate structure, and addresses any concerns related to retroactive ratemaking that may otherwise arise under rates set to recover less than the annual cost of service during the period of levelization.⁶
 - As noted above in paragraph 44, we address in argument further confirmation into the applicability and appropriate function of the RDDA.
46. The only variance deferral mechanism that Creative Energy has applied for is the RCVDA to capture any variances between actual and forecast regulatory costs.
- The current forecast of regulatory costs in relation to this proceeding is considered sufficient for setting initial rates, but such costs are uncertain and difficult to forecast accurately. Variances between forecast and actual regulatory costs can be material and are driven by factors largely outside of Creative Energy’s control.
 - It is for this reason that Creative Energy proposes a RCVDA to mitigate such a risk that a public utility should not have to bear. Most if not all utilities regulated by the Commission have equivalent deferral accounts, including Creative Energy in respect of its Core Steam and NEFC service areas. The Commission most recently confirmed its views specifically into the reasonableness of a regulatory cost deferral account in its Order G-227-209 Decision into Creative Energy’s Core Steam and NEFC 2019-22020 RRA.
 - We propose that a simple percentage of total bill rate rider approach to recover amounts in the RCVDA may be the most reasonable, fair and easy to administer approach. We propose that a 5 percent allocator be approved as reasonable.
 - Synopsis - the noted areas of interest are fully satisfied for the purpose of setting forecast regulatory costs and establishing a deferral account to recover or credit any variance with actual costs when so determined.

2.4 Customer Service Agreement

47. The inquiry in the proceeding into the proposed terms of Customer Service Agreement (**CSA**) concerned the purpose of and need for a standard assignment provision.

⁵ Commission Order G-36-21 Decision, section 4.2.4, page 33.

⁶ Refer to the response to BCUC IR 80.1

- It is appropriate to include an assignment provision in the CSA to specify the rights, if any, of each party to assign the CSA.
- Creative Energy confirms that the amended assignment provision in the proposed CSA does not grant the Customer any approval rights in respect of any corporate level reorganization, but there would be an agreement pursuant to which a new utility entity would agree to be bound by the obligations of Creative Energy under the original CSA, and subject to BCUC acceptance.
- Synopsis – any ostensible issues in respect of the proposed assignment provision have been satisfied and there were no countervailing considerations put forward by interveners.

3 The Capital and Development Costs of the Heating TES

48. With regard to the South Downtown Heating TES, Creative Energy submitted a final cost report (**Final Cost Report**) to the Commission as Appendix A to Exhibit B-5.
49. The Commission’s Order C-1-19 Decision granting a CPCN for the South Downtown Heating TES included Commission determinations regarding capital cost estimates – the Panel was satisfied that the cost estimates provided were in accordance with the level of accuracy contemplated under the Commission’s CPCN Guidelines.⁷ However, the Panel raised concerns about what it described as “cost overruns” of the Phase 1 NES and the risk of stranded assets associated to the temporary TEC, as follows:⁸

“The BCUC approved a request from Creative Energy to build a temporary facility to provide construction heat to Buildings 1 and 2, with associated capital costs of \$1,828,000. Creative Energy states that its actual capital costs incurred for building the Phase 1 NES were \$2,653,207, a budget overrun of 45 percent [*note*⁹]. It explains that the majority of the cost overruns were due to “fees/overheads” and “soft costs” such as engineering and design which it failed to include in the original estimate because its accounting system “did not clearly track project specific costs”. The Panel is concerned that the “fees/overheads” and “soft costs” added to the approved budget for the Phase 1 NES may not all be properly attributable to ratepayers. There is insufficient evidence on the record to determine whether the costs allocated to the Phase 1 NES after its completion were just and reasonable, and insufficient time remains before the occupancy date of the Development for the Panel to explore the issue.

...

The BCUC granted Creative Energy the authority to construct a temporary facility to provide construction heat to Buildings 1 and 2. However the Panel has two concerns with respect to Creative Energy’s prudence in its development of the NES. Firstly, the Panel notes that the actual capital expenditures for the Phase 1 NES exceeded Creative Energy’s estimated costs by approximately 45 percent. This over-expenditure is in excess of the accepted -20 to +30 percent accuracy range for an AACE Class 3 estimate, the standard to which the original Stream A costs were stated to meet. Secondly, as outlined above, Creative Energy’s chosen alternative has created a risk that some of the NES assets may not be needed once the containerized boiler plant is removed from its current location in 2023. Creative Energy has failed to explain or provide any clear plan for the future of the NES beyond 2023, which increases the Panel’s concern regarding the possibility of stranded assets, and therefore regarding Creative Energy’s prudence in its development of the NES. As a result, **the Panel recommends that the BCUC conduct a prudence review of the Phase 1 and Phase 2 NES capital expenditures prior to approving final rates for the Development.**”

⁷ Order C-1-19 Decision, page 28.

⁸ Order C-1-19 Decision, pages 28-29.

⁹ Creative Energy acknowledges that this extract sets out the overall determination of the Panel that there was insufficient evidence on the record to determine whether the costs allocated to the Phase 1 NES after its completion were just and reasonable. Our evidence and argument that follows is established upon this basis in response. We provide this note in isolation to clarify in the specific context that while Creative Energy did set out that its actual capital costs incurred for building the Phase 1 NES were \$2,653,207, we did not state that amount as a budget overrun. That phrasing, rather, was adopted by the Panel in its summary and the sentence therefore should be read in that context.

50. The future plan for replacing the TEC with permanent plant is the subject of separate directives in that decision and subsequent inquiry by the Commission in this and other proceedings, and has no bearing on the present matter of setting final rates for the heating and cooling services being provided to the customers presently. With respect to the so-called “cost overruns”, the Panel directed Creative Energy to “...file a Final Report within six months following the completion of the Phase 2 NES. The Final Report is to include a complete breakdown of the final costs of both the Phase 1 NES and the Phase 2 NES, a comparison of these costs to the estimates provided in the 1480 Howe Street TES Stream A application and this [CPCN] Application, and provide an explanation of all material cost variances”.
51. The Final Cost Report sets out, we believe, what the Commission directed in the Order C-1-19 Decision as referenced above. The Final Cost Report accordingly includes a category-by-category reporting of actual costs versus those reported in the CPCN Application (as filed on November 7, 2018), and also a category-by-category reporting of costs reported in the CPCN Application versus those reported in the registration for a Stream A TES (as filed on January 6, 2017).
52. As shown in section 1 and Table 2 of the Final Cost Report, the total cost of the Heating TES is well within the range of forecast costs reported in the CPCN Application for the project.¹⁰ The CPCN application reported a forecast project cost of \$3,508,000 at an AACE Class 3 estimate accuracy of -15%/+30% as is typical for a forecast for purposes of a CPCN application per the Commission’s CPCN Guidelines. Accordingly, at the time of filing the CPCN Application the project costs were forecast to be between \$2,981,800 and \$4,560,400. The final costs of \$3,758,882 are well within the range of costs upon which the CPCN was granted.
53. Moreover, the difference between the \$3,508,000 (at a -15%/+30% estimate accuracy) and the final cost of \$3,758,882 is almost entirely attributable to the effect of attributing AFUDC as a component of total actual costs, as shown on Table 2 of the Final Cost Report.
54. Through its IR No. 2 to Creative Energy and Series 69.0 IRs of IR No. 3, the Commission inquired into the matter of the increase in costs as compared to the costs reported in the registration of a Stream A TES in 2017, and also into comparisons of actual costs to the costs reported in the CPCN Application, and explanations of any variances, changes in costs by phase and any re-categorizations.¹¹
55. Creative Energy understands that these IRs into the actual costs of the Heating TES and comparisons to the various pre-development costs estimates were intended to assess whether there had been any imprudence on the part of Creative Energy’s management of the project.
56. The fundamental issue to be determined in a prudency review of a utility’s project costs is whether the subject project was prudently managed. That is, were project management decisions made in good faith and in a reasonably prudent manner such that the resulting costs should be recovered in rates for utility service? The Commission’s approach to prudency review of a utility’s project costs is set out in the Appendix to this Final Argument.
57. Creative Energy has confirmed that the Heating TES project was prudently managed, and Attachment 21.0 to Exhibit B-13 reinforces the overall demonstration that there were no material issues with project management and delivery.

¹⁰ The CPCN application was filed with the Commission on November 7, 2018.

¹¹ Ex. B-13, responses to BCUC Series 21.0 IRs; and Ex. B-16, responses to BCUC Series 69.0 IRs.

58. The Commission Panel for the Order C-1-19 proceeding found that there was, at the time of issuing that Order, “insufficient evidence on the record to determine whether the costs allocated to the Phase 1 NES after its completion were just and reasonable, and insufficient time remains before the occupancy date of the Development for the Panel to explore the issue”. Through the Final Cost Report and the inquiry in the present proceeding, it has been shown that the vast majority of material variances between the cost estimates provided (at time of Stream A registration and at time of CPCN Application submission) and actual project costs do not relate to project management decisions at all, but rather relate to errors of omission in the reporting of the cost estimates – for example, the omission of AFUDC in the CPCN Application and the omission of pre-development ‘soft’ costs in the Stream A registration. Reporting errors are not imprudent project management decisions (that is, decisions made not in good faith or in a reasonably prudent manner) nor are they “cost overruns” as the term is typically used, they are just mistaken omissions in the reporting which were subsequently corrected.
59. Through its Series 70.0 IRs of IR No. 3 to Creative Energy, the Commission requested additional information to clarify whether the costs allocated to the Phase 1 NES are just and reasonable and are properly attributable to ratepayers.¹² The suggestion appears to be that costs insufficiently related to the project have been allocated to the project. To our knowledge, the only costs allocated to the Heating TES that the Commission IRs suggest might not be attributable to the project are those specifically inquired into in the BCUC Series 70 IRs. In its responses to those BCUC IRs Creative Energy fully explained what the identified cost items are, how they relate to the Heating TES, and therefore why it is appropriate to recover these costs in rates for service provided by the Heating TES.¹³ Moreover, Creative Energy follows ASPE 3061.11 for the attribution of costs to projects as explained in the response to BCUC Series 24 IRs.
60. Over the entirety of our review and reporting, we have verified that all costs have been attributed to the project in accordance with ASPE 3061.11 with one exception, as we report in Attachment 69.1.1 to the response to BCUC 69.1.1. In Attachment 69.1.1, on the Summary sheet and on the Engineering (CEC GL) sheet, we note an amount of \$2,615 for the work of National Hydronics Group that was erroneously coded to South Downtown when it related to the NEFC service area.¹⁴
61. Creative Energy has confirmed that the Heating TES project was prudently managed and our further reporting into the final capital and development costs of the Heating TES reinforces the overall demonstration that there were no material issues with project management and delivery.

¹² Ex. B-16, response to BCUC Series 70 IRs.

¹³ We confirm also that the total of capital and development costs of the Heating TES reported in paragraph 18 do not include any costs associated with the First Baptist Assessment/Butterfly development (as referred to in the response to BCUC IR 70.1). No costs associated with that assessment/development have been attributed to the Heating TES in the general ledger, including the incidental amount of \$1,589 as referred to only in the CPCN budget. That amount will necessarily not be recovered in rates therefore.

¹⁴ In reference to Attachment 69.1.1 we also consider it to be worth clarifying that all reported costs in the attachment, excepting the \$2,615 amount, relate to South Downtown. The amounts within categories that span multiple projects are subtotals for the attribution of costs to the South Downtown Heating TES project only.

4 Rate Design

4.1 Introduction

62. We review below the basis of evidence and the noted areas of interest in the proceeding into the proposed rate design. Notable areas of interest in the proceeding include:
- Cost causation and the allocation/recovery of fixed versus variable costs to each rate design component;
 - The length of the levelization period; and
 - The mechanism of the RDDA and the compatible incentives to provide reliable, cost-effective service.
63. We offer the following overall comments, building upon the summary presented in section 1 of this argument:
- The customers of the Heating TES and Cooling DCS understand and accept the rate design as set forth on an indicative basis during the CPCN applications for each system and as now implemented under the interim approvals in effect. The customers have not expressed any concern to Creative Energy about the level of rates or the manner in which costs are recovered, nor did they raise any concern to the Commission in this proceeding.
 - The Commission submitted numerous IRs to Creative Energy requesting analyses of alternative rate design scenarios. The inquiry into alternative fixed versus variable cost recovery allocations and length of levelization period, for example, were not accompanied by any direct articulation of the objectives that the IR may have been seeking to understand or target. Rather, Creative Energy was tasked with assessing each scenario in isolation. This approach poses an overall design risk if it suggests that rate design can be developed within an isolated view of certain inputs without considering the whole together. For example, an ad hoc approach to cost allocation as suggested by the inquiry in the Series 90 IRs, for example, would impair the practicality of the rate design overall and the overall customer understanding and acceptance of the rates.
 - Synopsis – Creative Energy considers that none of the alternative rate design scenarios put forward to Creative Energy in the proceeding improves upon our consolidated development of a rate design with appropriate regard to the accepted rate design principles and the needs of our customers and that reasonably shares risk over contract duration.

4.2 The proposed rate design fairly allocates costs to customers

64. The fixed capacity charge will recover capital and development costs and those operating costs that do vary with energy consumption. The capacity charges are established on the basis of the total design peak demand for heating and cooling of each building, respectively; a \$ per unit of kW capacity as it were.

- Total design peak heating and cooling demand are the main drivers of the fixed costs of the systems. Correspondingly, the billing determinants to allocate those capital and operating costs to each building are the total design demands in kW of each building in the Vancouver House Development.
 - The fixed structure of the capacity charge thereby fairly and reasonably aligns with a cost causation rate setting principle under which rates ought to recover costs in a manner consistent with the factors that cause those costs; that is, in this case, with respect to costs that are not expected to vary with energy consumption.
65. The utility accepts a degree of risk by recovering operating costs that do not vary with energy consumption through the fixed charge. If such operating costs exceed the reasonable forecast of costs upon which the fixed charge is based, such costs will reduce the actual ROE. Creative Energy has the incentive to manage controllable operating costs within the reasonable forecast of costs as accepted by the Commission for the purpose of setting the rate.
66. Creative Energy believes that it is well accepted that fair rates follow cost causation and the proposed billing determinants align with this principle.
- It is the design peak demand of the building that causes the fixed costs of the TES. In our view, the design peak capacity of each building, not floor area, is the more direct and better indicator of the cost causation of the TES and is the reasonable and preferred billing determinant for a fixed capacity charge.¹⁵
 - A building which has lower design peak demand (due to higher building design efficiency, for example) would therefore pay a relatively lower capacity charge bill than a building of equal size with a higher design demand (due to lower design efficiency, for example).¹⁶
 - On the other hand, it would not be fair, nor just and reasonable, to provide a preferentially lower rate to a building because it has a higher design efficiency or because a particular type of space heating end-user resides in the building.¹⁷ Those are customer characteristics, not themselves drivers of cost causation in the utility. In our view the rather straight forward question is which billing determinant ties more closely to cost causation in relation to the utility equipment when considering how to fairly allocate fixed costs between buildings.
67. Correspondingly, the flow-through recovery of variable fuel costs is also fair, readily understood, transparent and verifiable, and the mechanism to allocate fuel costs incurred by the utility in a billing period to utility customers for consumption in the same applicable billing period is administratively simple and does not require a deferral account, rate rider or any regulatory process to set or adjust such a rate rider.

¹⁵ Refer to the response to BCUC IR 41.4

¹⁶ Refer to the response to BCUC IR 41.3

¹⁷ As might be suggested by BCUC Series 41-43 IRs

- The proposed variable charge mechanism is a transparent and verifiable means to flow-through the actual fuel costs of the Heating TES and Cooling DCS, and it is therefore also an efficient price signal.¹⁸

4.3 The proposed rate design is simple and easy to administer

68. The fixed capacity charge is simple to apply for billing purposes, and does not require any deferral accounting or other complex mechanics or reconciliations.
69. The flow-through recovery of variable fuel costs is also easy to administer.
 - Creative Energy notes that larger utilities commonly use deferral mechanisms and periodic (quarterly or annual for example) adjustments to a rate rider to flow the utility’s actual fuel costs through to customers. Such utilities may have a large portfolio of energy supply resources and thousands of customers.
 - Creative Energy’s proposal accomplishes the same thing (that is, flowing through actual fuel costs to customers) without requiring a deferral mechanism, stabilization account or burdensome regulatory process in respect of review and approval of adjustments to the charge and/or rate rider.¹⁹
70. Creative Energy communicated its proposed approach to the capacity and variable charges with the Owner/Developer at the time that the Owner/Developer was the customer of buildings 1, 3 and 4 and in control of building 2. The customer expressed no concerns. All billing elements are transparent to, understandable and verifiable by the customers.

4.4 The proposed rate design is practical and compatible with optimal operation

71. There are no characteristics of the proposed fixed capacity charge and variable charge rate design that in any way provide an incentive for Creative Energy not to operate and maintain the system in the most efficient manner.
72. Under our proposal to flow-through fuel costs to customers, and not to include any operating costs that do not vary with energy consumption for recovery through the variable charge, there does not arise any prospect for variances in fuel costs or energy consumption to cause an impact to net income. Correspondingly, there is no hypothetical or perverse incentive to operate the systems in a suboptimal manner that might cause variances in fuel costs.

4.5 The proposed rate design supports rate stability and customer understanding and acceptance

4.5.1 Fixed versus Variable Cost Allocation

73. The percentage split between fixed and variable costs allocated to the two charges has not been targeted directly as a rate design input, but refers rather to the proportion of the cost of service

¹⁸ Refer to the response to BCUC IR 13.2, for example

¹⁹ Refer to the response to BCUC IR 11.1, for example

(i.e., natural gas, electricity and water costs) that varies with customer energy consumption versus the proportion that does not (i.e., all other costs to be recovered in the fixed charge).

74. There was inquiry in the proceeding into whether it may be justifiable to allocate any portion of maintenance or operator costs or income tax expense for recovery through the variable charge. We have confirmed that such operating costs do not vary with energy consumption.
75. We have further confirmed, as reviewed in the responses to BCUC Series 87 IRs, that the monthly variable charge as proposed may not exhibit significant variation in any given year.²⁰

4.5.2 Levelization period

76. The proposed levelized rates are stable, will increase in a predictable and consistent manner, reasonably match cost recovery with cost causation and will recover the cost of service over 30 years.
77. Annual cost-of-service rates would be less stable and predictable, and would be very high initially and decrease over time. A shorter-levelization period may have some benefit to advancing cost recovery, but rates would ultimately be less stable and require more frequent rate applications.²¹
 - With load forecasts expected to be relatively flat over time, annual cost-of-service rates will be relatively less stable and decline over time. This is sub-optimal in respect those Bonbright principles that favour rates that increase predictably over time, customer understanding and acceptance, and rate stability.²²
 - Creative Energy understands that rates that begin at a relatively low level and steadily increase over time in the context of inflation are most readily understood and accepted by utility customers.
78. The customers of the Heating TES and Cooling DCS (being building owners) are certainly capable of understanding a rate structure with rates that begin high and decline over time, but that is not to say the customers would prefer such a rate structure. They might accept such rate structure but only begrudgingly. Creative Energy considers that it would not seek to describe a higher initial rate as a benefit within the context of a building developer/future customer evaluating its options for procuring an economic and competitive option for heating and cooling a building/development. In general, such would also not accord with the Bonbright principle of customer understanding and acceptance of the rates.²³

²⁰ We note that rate stability is a secondary consideration in the structuring of the recovery of variable charge.

²¹ Refer to the response to BCUC IR 36.5.1

²² Refer to the response to BCUC IR 36.8

²³ Refer to the response to BCUC IR 82.2

4.6 The proposed rate design equitably balances risk and maintains incentives to control costs

79. The proposed rate structure balances cost recovery and risk in that operating costs that do not vary with energy consumption are recovered through a fixed charge. The utility bears the risk if actual operating costs differ from the forecast under which rates are approved.
80. The RDDA allows for a levelized rate structure, and does not guarantee recovery of actual costs.
- Additions to the RDDA are confirmed and approved by the Commission on a forecast not actual basis; that is, based on forecast cost of service and forecast revenues at approved rates.
 - The RDDA is not a means to protect the shareholder from the risk of variances in controllable costs or to absolve utility management from being accountable for variances around reasonable forecasts.²⁴
81. Creative Energy’s incentives to forecast reasonable operating and maintenance costs and to manage costs in the context of such forecasts is the same as any other utility. The utility is accountable for managing costs within the context of reasonable budgets.
82. Customers can reasonably be expected to benefit in part, because holding utility management accountable for variances around forecasts provides an incentive to control those costs that would otherwise be reduced with the creation of a deferral account.

All of which is respectfully submitted this 12th day of March 2021.

By:



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²⁴ Refer to the responses to BCUC UR 80.1; BCOAPO IRs 1.1 and 1.2, for example.

Appendix - The Commission's Approach to Prudency Review

In the BCUC's Order G-16-09 Decision into BC Hydro's F2009 and F2010 RRA, the Commission considered the proper approach to an examination of the prudency of a utility's expenses. The Commission made the following determinations:²⁵

"It was common ground among the parties to the hearing that the following paragraphs from the Ontario Court of Appeal decision in *Enbridge Gas Distribution Inc. v. Ontario(Energy Board)* [2006] O.J. No. 1355, 41 Admin L.R. (4th)69(C.A.) ("*Enbridge Gas*") represent the law on the proper approach to an examination of the prudency of a utility's expenses:

10 The approach of the OEB to the "prudence" inquiry is captured in the following extract from its reasons:

While the parties described it in somewhat varying terms, in the Board's view they were in substantial agreement on the general approach the Board should take to reviewing the prudence of a utility's decision.

The Board agrees that a review of prudence involves the following:

- Decisions made by the utility's management should generally be presumed to be prudent unless challenged on reasonable grounds.
- To be prudent, a decision must have been reasonable under the circumstances that were known or ought to have been known to the utility at the time the decision was made.
- Hindsight should not be used in determining prudence, although consideration of the outcome of the decision may legitimately be used to overcome the presumption of prudence.
- Prudence must be determined in a retrospective factual inquiry, in that the evidence must be concerned with the time the decision was made and must be based on facts about the elements that could or did enter into the decision at the time.

11 Neither the Divisional Court nor either party to this appeal takes issue with the correctness of the above quoted passage from the OEB's reasons. The "prudence" inquiry described by the Board has two stages. At the first stage, the decision of Enbridge is presumed to have been made prudently unless those challenging the decision demonstrate reasonable grounds to question the prudence of that decision. At the second stage of the inquiry, reached only if the presumption of prudence is overcome, Enbridge must show that its business decision was reasonable under the circumstances that were known to, or ought to have been known to, Enbridge at the time it made the decision.

12 In the above quoted extract from its reasons, the OEB expressly alluded to the limited role played by hindsight. Hindsight, that is knowledge of facts relevant to the prudence of the business decision gained after the decision was

²⁵ Order G-16-09 Decision, at pages 31-33.

made, could not be used at the second stage of the “prudence” inquiry to determine the ultimate question of whether the decision was prudent. Those facts could, however, be taken into consideration at the first stage in determining whether the presumption of prudence had been rebutted.”

...

No Intervener takes a contrary position in respect of the prudence aspect of expenditures that reflected BC Hydro’s past decisions, or that the appropriate standard is that reflected in *Enbridge Gas*, and crystallized in *ATCO 2005* as the “two-part test.” In essence, the onus to rebut the presumption of prudence is borne by the party seeking to impugn the decision of the utility, but once rebutted, the objective test of the utility’s decision is the reasonableness of that decision in light of the facts known to it at the time the decision was made...”

The Commission reached the following conclusion:²⁶

“Having considered the extensive submissions and authorities cited by the parties, the Commission Panel determines that in the case of reviewing the cost consequences of BC Hydro’s past management decisions a rebuttable presumption of prudence is relevant, and that the two- part test arising from the *Enbridge Gas* and *ATCO 2005* decisions applies.”

The Commission went on to determine that the presumption of prudence has little, if any, relevance to planned and forecast expenditures, as distinct from the cost consequences of past management decisions referred to above.

²⁶ *Ibid*, at pages 38-39 (boldface in original).