British Columbia Utilities Commission

IN THE MATTER OF

CREATIVE ENERGY VANCOUVER PLATFORMS INC.

2016–2017 REVENUE REQUIREMENTS APPLICATION AND RATE DESIGN
FOR NEFC HOT WATER SERVICE

DECISION
and Order G-167-16

November 18, 2016

Before:
D. A. Cote, Commissioner/Panel Chair
W. M. Everett, Commissioner

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EXECUTIVE SUMMARY

Creative Energy Vancouver Platforms Inc. (Creative Energy, CE) began operation of its Steam Service in the late 1960's and currently provides Steam Service to approximately 200 customers through its thermal energy system. In 2016, Creative Energy will begin providing hot water service in the Northeast False Creek (NEFC) neighbourhood (NEFC Service) pursuant to a Certificate of Public Convenience and Necessity (CPCN) under Order C-12-15 dated December 8, 2015 (NEFC CPCN). Phase 1 of the NEFC system will receive steam to heat water from the existing Creative Energy Steam Service network.

The Creative Energy 2016-2017 Revenue Requirements Application and Rate Design for Steam Service and NEFC Hot Water Service (Application) filed on April 1, 2016, seeks, among others, the following approvals:
In respect of Steam Service:

(a) Interim and final approval of an increase to Steam Service rates of 6.23 percent effective May 1, 2016 and interim approval of an increase of 6.23 percent, and subsequently amended to 7.15 percent, effective January 1, 2017, utilizing a rate smoothing methodology;

(b) Approval of a non-rate base Special Services Deferral Account and a non-rate base Fuel Cost Stabilization Account (FCSA); and

(c) Acceptance of the capital expenditures and projects for 2016 and 2017.

In respect of NEFC Service:

(a) Final approval of NEFC Service rates effective August 1, 2016, and interim approval of 2017 NEFC Service rates effective January 1, 2017;

(b) A 50 percent fixed and 50 percent variable rate design;

(c) Approval to record certain variances in the Revenue Deficiency Deferral Account (RDDA); and

(d) Acceptance of the capital expenditures and projects for 2016 and 2017.

NEFC terms and conditions have been filed with the British Columbia Utilities Commission as part of a separate proceeding.

The written regulatory process included two rounds of information requests followed by final submissions and Creative Energy's reply submission. Five organizations intervened in the proceeding.

<u>Contextual issues</u>

A number of contextual issues were raised in this proceeding that need to be addressed. The key issues raised and the Panel's determinations follow:

- Whether NEFC met the Thermal Energy Service Guidelines (TES Guidelines): The Panel finds that sufficient evidence has been provided to generally satisfy the intent of the TES Guidelines although all the requirements had not been met.
- Whether the Commission could approve a portion of the revenue deficiency relating to a period prior to the application filing date: The Panel finds that it has the authority to set rates on a prospective basis only and has no authority to allow recovery on a retroactive basis and approves the recovery of the revenue deficiency for the period subsequent to the date the Application was filed only.
- Whether Creative Energy's cost allocation methodology is reasonable. The Panel remains concerned with cost allocations and directs CE to conduct a cost allocation study.

Steam Service load forecast

The Panel approves CE’s new load forecasting methodology noting it is both reasonable and appropriate. The Panel also approves the Steam Service 2016 forecast customer load (inclusive of NEFC) at 1,073,439 thousand pounds but will allow CE to file an updated 2017 load forecast before Steam Service rates are set as permanent.

Steam Service – revenue requirements

The Panel assessed the components that make up the Steam Services revenue requirements. Key among these are base fuel expenses, water expenses, operation and maintenance (O&M) expenses, taxes and capital additions.

The Panel approves forecasted fuel costs of $10,420,425 for 2016 and $11,913,531 for 2017. However, concerns were raised regarding the Commission’s oversight of the Fuel Cost Adjustment Charge (FCAC) and the management of the related FCSA. Therefore, starting in 2017 Commission approval is required for the FCAC on the basis of a formula set out by the Panel. The Panel has also provided specific direction for the management of the FCSA in a manner more typical of a Commission approved variance deferral account.

Water expenses are approved with a minor downward adjustment, as Creative Energy did not justify a one percent inflation factor in its estimates. The Panel also approves Creative Energy’s tax calculation methodology but directs it to revise its municipal tax estimates to coincide with this methodology.

O&M expenses are broken down by function into steam production, distribution and sales general and administration. Creative Energy has proposed a new employee and management incentive program which has received Panel approval in principle. However, based on its review of the program, the Panel directs CE to reduce certain forecast incentive amounts.

The Panel approves proposed distribution expenses and proposed steam production expenses in 2016 and 2017 for Steam Service as filed except for a $20,000 reduction in steam production supervision and labour costs in 2017. Many of the proposed total sales general and administration expenses are approved as filed but the Panel makes a number of changes related to the methodology to allocate costs to NEFC and other unregulated projects Creative Energy currently has underway. The Panel reaffirms the need for a cost allocation study to be completed prior to the filing of the next revenue requirements application. The Panel also approves the establishment of a deferral account to capture variances in certain special service costs.

The Panel accepts Creative Energy’s Steam Service capital expenditures of $2,005,500 for 2016 and $1,270,000 for 2017 along with its rate base forecasts. However, the Panel directs CE to exclude construction work in progress from working capital starting in 2016 and account for it outside of rate base until such time as those projects become used and useful.

The Panel approves a permanent increase to Steam Service rates of 6.23 percent effective May 1, 2016, subject to the adjustments outlined in the Decision based on Creative Energy’s rate smoothing methodology to recover or refund a portion of the 2016 revenue deficiency in 2017.

The Panel also sets interim Steam Service rates effective January 1, 2017 but rejects the request for an interim rate increase. The 2017 Steam Service rates will be made final following the filing of the 2017 Steam load forecast.

<u>NEFC – revenue requirements and rate design</u>

The Panel accepts the NEFC load forecast of 1,718 MWh in 2016 and 9,141 in 2017 as proposed by Creative Energy.

The Panel approves Creative Energy's methodology to treat NEFC as a Steam customer but directs it to charge NEFC for fuel through the FCAC as it does all other Steam Service customers. On that basis the Panel approves NEFC's steam expenses of $43,000 in 2016 and $222,700 in 2017. Noting that CE had changed its methodology to treat NEFC as a Steam Service customer, the Panel directs it to remove steam production expenses of $25,400 in 2016 and $62,300 in 2017 and natural gas purchases of $53,000 in 2016 and $314,000 in 2017.

The Panel approves recovery of certain forecast variances as requested by Creative Energy but directs that they be captured in a separate deferral account and not in the RDDA.

The Panel rejects Creative Energy's request for a 50 percent fixed and a 50 variable rate design and finds that while the ratio may vary over time, a 40 percent fixed and 60 percent variable cost allocation is appropriate and reflects the allocation principles in the NEFC CPCN Decision while providing an efficient price signal to customers.

The Panel determines it has the jurisdiction to approve NEFC's rates as final once Creative Energy has obtained approval for the NEFC Connection Agreement (Terms and Conditions). Therefore, the Panel approves permanent NEFC Service rates for 2016 and 2017, subject to the adjustment outlined in the Decision, effective the date Creative Energy receives Commission approval for the NEFC Terms and Conditions. CE may not begin charging for NEFC Service until this approval has been granted.

The Panel rejects the request to have 2017 NEFC Service rates set as interim subject to the 2017 updated load forecast given that NEFC has approval to recover revenue variances resulting from actual load through a deferral account.

For both Steam and NEFC Service, the Panel directs Creative Energy to recalculate 2016 and 2017 revenue requirements reflecting the adjustments outlined in this Decision in a compliance filing.

1.0 INTRODUCTION

1.1 Background

Creative Energy Vancouver Platforms Inc. (Creative Energy or CE) is a thermal energy utility whose rates are regulated by the British Columbia Utilities Commission (Commission or BCUC). Creative Energy is a wholly owned subsidiary of Creative Energy Platforms Canada Corp. (Creative Energy Corp.) In March 2014, Creative Energy Corp. acquired Central Heat Distribution Ltd., which had originally begun operations as a steam production plant and distribution network in downtown Vancouver under a Certificate of Public Convenience and Necessity (CPCN) granted by the Commission in 1968. At that time, many buildings used fuel oil or gas boilers for heating. Central Heat used gas boilers to produce steam that was distributed to individual buildings through a network of underground pipes. The company grew steadily and by the time it was acquired by Creative Energy Corp. in 2014, Central Heat Distribution Ltd.'s 14 km network of pipes was serving over 200 buildings in Vancouver's downtown core.

CE currently provides Steam Service to approximately 200 customers from its thermal energy system (TES) located at 720 Beatty Street, Vancouver, BC. It plans to build on the existing downtown Beatty Street plant and expand its 14 km network of pipes to create a network of localized, low carbon neighbourhood energy systems in Metro Vancouver.[1]

Creative Energy's vision for the downtown Vancouver has four pillars:

- significantly growing the customer base for low carbon district energy;
- extending district energy through new, more creative network technologies including hot water and ambient systems;
- enhancing customer services and offerings; and
- dramatically reducing greenhouse gas emissions and diversifying energy sources.[2]

In 2016, Creative Energy will begin providing hot water service to the Northeast False Creek (NEFC) neighbourhood pursuant to a CPCN under Order C-12-15 dated December 8, 2015 (NEFC CPCN). The NEFC system will receive steam from the existing steam network to produce hot water.

On April 1, 2016, Creative Energy filed an application to set rates for steam service and NEFC hot water service for the 2016 and 2017 test period and for approval of a rate design for NEFC. The Application does not however, include the NEFC Terms and Conditions as they have been filed with the Commission as part of a separate proceeding. CE treats steam customers and hot water customers as two separate classes of service, Steam Service and NEFC Service.

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[1] Creative Energy's website http://creativeenergycanada.com.
[2] Exhibit B-7, BCSEA-SCBC IR 2.3.1.

During the review of the Application, as set out in the attachment to Exhibit B-11, BCUC IR 1.9.2(ii) (referred to as Appendix 19), Creative Energy amended the Steam Service's and the NEFC Service's revenue requirements for 2016 and 2017 and updated Steam Service rates for 2017. By request of the Commission, Creative Energy consolidated several of the appendices, some which were updated for the amendments proposed, and filed them along with the original Application as Exhibit B-1A.

1.2 Approvals sought

In its Application, Creative Energy seeks the following:

In respect of Steam Service rates:

- Interim and final approval for an increase to Steam Service rates of 6.23 percent, effective May 1, 2016;
- Interim approval for an increase in 2017 Steam Service rates initially sought at 6.23 percent and subsequently amended to 7.15 percent, effective January 1, 2017.[3] Approval of the revenue requirements for 2017, but not the load forecast. Rates for 2017 are to be made final following the filing of the updated 2017 load forecast in November 2016;
- Approval for a non-rate base Special Services deferral account, with a one year amortization period and carrying costs based on short term debt;
- Approval for a non-rate base Fuel Cost Stabilization deferral account, with carrying costs at the weighted average cost of debt (WACD); and
- Acceptance of the capital expenditures and projects for 2016 and 2017 for Steam Services pursuant to section 44.2(3) of the *Utilities Commission Act* (UCA).

In respect of NEFC Service rates:

- Final approval of NEFC Service rates effective August 1, 2016, and interim approval of the NEFC Service Rates effective January 1, 2017, as set out in the table below;

Description	Abbreviation	Effective Rate	Fixed Charge	Variable Charge
NEFC Hot Water Rates	NEFC HW	2016: $85 per MWh 2017: $87 per MWh	2016: $0.33/m2/mth 2017: $0.34/m2/mth	2016: $43 per MWh 2017: $43.89 per MWh

- Approval to recover certain variance between forecast and actual amounts in the Revenue Deficiency Deferral Account; and
- Acceptance of the capital expenditures and projects for 2016 and 2017 for NEFC Service, pursuant to section 44.2(3) of the UCA.

1.3 Regulatory process

By Order G-49-16 dated April 12, 2016, the Commission established a preliminary regulatory timetable which, among other things, provided for one round of information requests (IRs) and a comment process on a proposed further regulatory timetable that included dates for a second round of IRs, followed by written arguments.

By Order G-49-16 the Commission also approved interim Steam Service rates effective May 1, 2016, but declined to approve Creative Energy's request for interim rates for the NEFC hot water service effective August 1, 2016.

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[3] Exhibit B-18, BCUC IR 65.2.

Five organizations intervened in the proceeding: BC Sustainable Energy Association and Sierra Club BC (BCSEA-SCBC); Old Age Pensioners' Organization, Active Support Against Poverty, Council of Senior Citizens' Organizations of BC, Disability Alliance BC, and the Tenant Resource and Advisory Centre (BCOAPO); Commercial Energy Consumers Association of British Columbia (CEC); FortisBC Energy Inc. (FEI); and FortisBC Alternative Energy Services Inc. (FAES).

By Order G-92-16 dated June 20. 2016, the Panel issued the final regulatory timetable specifying dates for a second round of IRs and final submissions.

Creative Energy and interveners filed their final submission on July 27, 2016 and August 3, 2016, respectively. Creative Energy filed its reply submission on August 15, 2016.

1.4 Approach to the Application

There are a number of issues in this Application that are contextual in nature. These will be addressed in Section 2.0 and include a number of issues that were raised within the proceeding which the Panel has determined need to be addressed before moving forward with the principle revenue requirements issues within the Application. Following this, Section 3.0 will address the Steam Demand Forecast and a new forecast methodology proposed by Creative Energy. Section 4.0 will deal with revenue requirements and rates for Steam Service with an examination of fuel and water expenses, the Fuel Cost Adjustment Charge and the Fuel Cost Stabilization Account, Operations and Maintenance Expenses and rate base. Section 5.0 will address NEFC Service including revenue requirements, rates and rate design.

2.0 CONTEXTUAL ISSUES

During the proceeding a number of broader issues of importance were raised which are contextual in nature. These include the following:

- Adherence to the Thermal Energy System Regulatory Framework Guidelines (TES Guidelines);
- Opportunity to earn approved returns;
- Recovery of January 1 to March 31, 2016 Revenue Deficiency; and
- Allocation of costs among CE's business interests.

In addition, the Panel addresses an additional issue related to the quality of the application and resulting difficulties arising.

2.1 Adherence to TES Guidelines

An important issue raised within this proceeding is whether Creative Energy has met the TES Guidelines requirements regarding Steam Service and NEFC Service.

Under the UCA, a TES provider is considered a public utility.[4] The TES Guidelines were established in August 2014 and are intended to inform an individual or a company who owns or operates a TES within British Columbia, on the regulatory approval process and ongoing regulatory requirements to construct and operate a TES and charge rates to customers.[5] Under the TES Guidelines, Creative Energy's Steam Service and NEFC Service are considered as a Stream B TES.

As the Steam Service system was regulated prior to the TES Guidelines being established, it is subject to the following requirements as set out in the TES Guidelines:

> From August 28, 2014 that TES will be subject to the regulatory requirements of a Stream B TES, regardless of the size of the TES. The TES Provider is required to comply with the ongoing requirements for Stream B systems outlined in the Guidelines[6]

Since the NEFC Service came into existence after August 28, 2014, the date the TES Guidelines were established, it is therefore subject to the full suite of requirements including CPCN approval to build and operate the system, which was granted in December 2015.[7]

Creative Energy in response to BCUC IR 39.1 and 39.2 has explained how NEFC has met the TES Guidelines. Table 1 summarizes some of CE's responses.

TABLE 1

Summary of CE Comments Concerning NEFC Meeting TES Guidelines[8]

Section 2.4.3 of TES Guidelines	Creative Energy Comments
Consistent with UCA Sections 59-61	Creative has reviewed its rates and submits they are compliant with the UCA. Similar rate designs have been used by other TES projects. The Commission in the NEFC CPCN Decision has already approved some rate setting principles, namely: • RDDA (including interest at weighted average cost of capital (WACC); • The capital structure, Return on Equity (ROE) and debt rate; • The cost allocation concept (but not the specifics of cost allocation); • The proposed two-part rate design.

[4] Order G-27-15, Appendix A, p. 6.
[5] Order G-27-15, Appendix A, p. 5.
[6] Order G-27-15, TES Guidelines, p. 24.
[7] Order C-12-15.
[8] Exhibit B-11, BCUC IRs 1.39.1 and 1.39.2.

Equitable balance of risk between the utility and ratepayers	The balance of risk is similar to other TES projects. Deferral account does not include controllable costs. The fixed/variable rate structure protects customers if energy performance in new buildings does not meet expectations while ensuring customers pay their fair share of fixed costs.
Use the least deferral accounts possible	NEFC deferral account approved in CPCN Decision. Consistent with other Stream B utilities.
Restrict ability of utility to pass controllable costs to ratepayers	Controllable costs are excluded from the RDDA.
Use the least amount of regulatory oversight to protect the ratepayer (minimize the regulatory burden and costs on the utility, ratepayer and the Commission)	Creative Energy's customers have been well served by light-handed regulation in the past. The cost of this proceeding will affect future rates and that may not be in the best interests of customers.
Avoid rate shock (>10% increase in rates per annum is generally considered "Rate Shock")	Rate increases do not exceed 10% per year.

Section 2.4.4 of TES Guidelines	**Creative Energy Comments**
A Stream B rate application must include: Description and details of the proposed rates (at minimum) for the initial five years for all rate classes	Application has proposed rates for 2016 and 2017 and forecast rates for five years (and beyond).
Include information on:	
a. The rate design (i.e. fixed/variable component, single/multiple rate classes, etc.)	The application has a single class of customer with a fixed/variable component which has already been approved by the Commission [NEFC CPCN].
b. How rate increases will be determined	Commission has approved a levelized approach to rates. Forecast rate increases in the base model were set at CPI (2%). Starting level was set to ensure recovery of RDDA in 15 years.
c. Why the rate(s) and rate design is fair and reasonable	The rate design has already been approved by the Commission. It is comparable to all other approved rate designs for other recent new Stream B utilities.

Options and terms for customers who enter into contracts to opt out/cancel the energy supply services	Creative expects to file a Customer Service Agreement with a 30 year term, with automatic renewal thereafter, with the right for customers to "opt out/cancel" after the 30 year term. This will be filed with the Connection Agreement [as part of a separate proceeding].
Information confirming the proposed rates will be competitive with other service options that are available to customers in the new service area (if appropriate)	Creative refers to evidence in the CPCN proceeding (detailed references are included in the IR response).
If the proposed rate is based on a regulated Cost-of-Service mechanism, this will be considered as a method of last resort. Therefore the following must be provided:	
a. analysis of alternative rate setting mechanisms; b. justification as to why these alternatives are not preferable.	Creative refers to its responses to FAES IR 1.3.1 and 1.3.2. For NEFC rates Creative states it followed the same process that FAES has followed in establishing rate design. Creative also reviewed rate designs of recent Stream B projects such as Corix's UBC NDES rate application, UniverCity, River District and Dockside Green. Creative was also 'informed' by the current approach to rate setting in the core Steam Service utility.
A Stream B Rates Application must also include a proposed tariff containing fees and terms and conditions of service.	Creative will file the terms and conditions with the Connection Agreement [as part of a separate proceeding].

CE's actual responses are listed in BCUC IRs 39.1 and 39.2.

Submissions

FAES claims Creative Energy's Application fails to meet the requirements of the TES Guidelines. FAES' position is the Commission should apply the TES Guidelines in a fair, reasonable and consistent manner. Relevant to its position are subsections related to sections 2.4.3, 2.4.4 and 2.5 of the TES Guidelines noted as follows along with FAES' submissions.

- Section 2.4.3 of the TES Guidelines:
    1. Provide an equitable balance of risk and cost (such as forecast load and cost risk) between the utility and the ratepayer or generation of ratepayers; and
    2. Use the least deferral mechanisms possible.

FAES argues that CE addresses the balance of risk and cost between the utility and ratepayers by pointing out that it is comparable to other Stream B utilities and beyond that only "talks about a balance of *costs among customers."*[9] Further, FAES submits "rather than addressing how CE has used the least deferral mechanisms possible, Creative Energy responds that the deferral account for NEFC has already been approved by the Commission."[10]

- Section 2.4.4 of the TES Guidelines:

A Stream B rate application and calculations must include:

i. Description and details of the proposed rates (at a minimum) for the initial five years for all rate classes. Include information on:

   a) The rate design;

   b) How rate increases will be determined; and

   c) Why the rate design is fair and reasonable.

ii. Options and terms for customers who enter into long term contracts to opt out/cancelling the energy supply services;

iv. If the rate proposed is based on regulated COS rate-making mechanism, this will be considered as a method of last resort. Therefore the following must be provided:

   a) Analysis of alternative rate setting mechanisms for the Project;

   b) Justification as to why these alternatives are not preferable, making reference to:

      1. The natural monopoly characteristics of the system;

      2. The competitive market potential for the project;

      3. The utility's obligation to serve new customers; and

      4. Rate setting mechanisms that encourage public utilities to increase efficiency, reduce costs and enhance performance.

[9] FAES Final Submission, p. 7.
[10] FAES Final Submission pp. 4 and 7.

FAES argues that when the Commission asked CE to provide evidence concerning Section 2.4.4 of the TES Guidelines its primary response was the Commission had already approved that requirement. CE has also failed to provide analysis of alternative rate setting mechanisms and why they are not preferable to cost of service. FAES also points out that CE references its Customer Service Agreement which is a separate hearing to address the “options and terms” requirement. FAES notes that the hearing to review the Customer Service Agreement (CSA) has been adjourned pending a Decision on another proceeding and CE has not addressed how this will impact its request for interim and final NEFC Service rates. FAES concludes by stating it “does not believe Creative Energy has provided an adequate response to requirement 2.4.4 (ii) of the TES Framework [Guidelines].”[11]

- Section 2.5

  Any TES that has previously been granted a CPCN will continue to operate under that CPCN and should not re-register under this TES Guideline. From August 28, 2014 that TES will be subject to the regulatory requirement of a Stream B TES regardless of the size of the TES. <u>The TES provider is required to comply with the ongoing requirements for Stream B systems outlined in the Guidelines.</u>[12] [Emphasis added.]

FAES asserts there is no question the TES Guideline principles and requirements apply to NEFC TES. FAES, noting CE’s responses to various Commission and FAES IRs, states that CE “cannot rely on the fact the Commission approved certain rate parameters in the NEFC CPCN Decision of 2015 to meet these requirements.” While some of the parameters could be linked to the proposed fixed/variable rate design and cost of service (COS) rates, FAES argues there is nothing in the NEFC CPCN Decision that provided an exemption from principles outlined in the TES Guidelines as they pertain to Stream B.[13]

With respect to NEFC Service rates, FAES finds the evidence in support of CE meeting TES requirements as provided in response to IRs, to be “woefully inadequate.”[14] In addition, it asserts that Creative Energy is attempting to circumvent the TES Framework by using the prior Commission approvals to justify the rate design, deferral accounts and COS rates as proposed in the Application.[15]

With regard to Steam Service, FAES points out that the Commission’s Decision in Creative Energy’s 2015-2017 Revenue Requirements Application (CE 2015-2017 RRA) made no mention of the TES Guidelines. FAES submits that if the Commission determines the TES Guidelines apply to the Steam Service Creative Energy, it has failed to meet the requirements of sections 2.4.3 and 2.4.4 of the Guidelines noting that Creative Energy has not responded to IRs addressing these topics. FAES makes no judgment or recommendation regarding the choice of rate setting methodology for the Steam Rates but observes that the current TES Framework with respect to TES caught under Section 2.5 is unclear and should be addressed.[16]

[11] FAES Final Submission, pp. 5, 7 and 8.
[12] FAES Final Submission, p. 5.
[13] FAES Final Submission, pp. 4 and 8.
[14] FAES Final Submission, p. 7.
[15] FAES Final Submission, p. 8.
[16] FAES Final Submission, p. 6.

Creative Energy responds to FAES' submissions by stating that it relies on the "totality" of its evidence, including responses to IRs to demonstrate its compliance with TES Guidelines. It submits that its evidence in this regard is comparable, and in many ways more thorough than evidence provided in other Stream B rate proceedings.[17] Creative Energy also states that in addition to the TES Guidelines it was guided by Commission Decisions with respect to Stream B projects made subsequent to the creation of the TES Guidelines[18] and also relied on "certain rate parameters" approved in the NEFC CPCN Decision.[19] Creative Energy argues that relying on findings in previous Commission Decisions is a reasonable approach to take and is by no means an attempt to circumvent the TES Guidelines. Any utility would want prior approvals included on the record, and not re-arguing rate parameters which have already received approval, is hardly circumvention as it is a rational approach to regulation.

Commission discussion

Steam Service

Creative Energy's Steam Service has been regulated for a considerable time on a COS basis including a rate Decision by the Commission subsequent to the release of the TES Guidelines.[20] The Panel considers it unreasonable to require Creative Energy to justify its use of COS methodology given its long history of using this approach, a lack of any complaints by ratepayers of this form of regulation and past Commission Decisions that have considered this methodology to be just and reasonable**.** Therefore, the Panel finds that a reasonable interpretation of the requirement to meet the "ongoing requirements" of a Stream B utility is that given these circumstances, a utility regulated by the Commission prior to August 28, 2014, should not be required to re-justify the form of regulation in subsequent proceedings. An exception to this would be where an intervener provides evidence that the methodology is no longer just and reasonable or the Commission finds it is in the public interest to have such a review. The Panel finds no such review is justified or in the public interest at this time.

NEFC Service

FAES submits that Creative Energy has failed to meet the TES Guidelines in a number of areas. These are as follows:

1. Provision of an equitable balance of risk and cost between the utility and the ratepayer or generations of ratepayers.

The Panel finds that the balance of risk and cost between CE and the ratepayer or generation of ratepayers is similar to the balance in other approved TES projects. We note the fixed/variable rate structure employed by CE provides some degree of protection to ratepayers in the event the buildings do not perform as expected but also note that the utility faces some degree of risk with respect to controllable costs. On balance the Panel finds that Creative Energy has met this requirement.

2. Use the least number of deferral mechanisms possible.

[17] Creative Energy Reply Submission, p. 18.
[18] Creative Energy Reply Submission, pp. 19, 20.
[19] Creative Energy Reply Submission, p. 19.
[20] FAES Final Submission, p. 6.

Consistent with other Stream B utilities Creative Energy has established an RDDA as previously approved by the Commission. In managing this account CE expects the more rapid build out of NEFC will result in the account having balances with a lower magnitude and a shorter duration for amortization than other recent Stream B utilities. Based on the Panel's determinations on deferral mechanisms set out in this Decision, the Panel finds this requirement has been met.

3. Options and terms for customers who enter into long term contracts to opt out/cancelling the energy supply services.

Creative Energy expects to file a Customer Service Agreement with a 30 year term, an automatic renewal thereafter providing the right for customers to "opt out/cancel" after the 30 year term. This will be filed with the Connection Agreement inclusive of Terms and Conditions. While the proposed Customer Service Agreement may be similar to provisions in other approved TES projects, the separate proceeding dealing with the Connection Agreement has not rendered a Decision, and the condition has not been met. The NEFC Connection Agreement will be addressed further in Section 5.8.1.

4. Analysis of alternative rate setting mechanisms for the Project and justification as to why these alternatives are not preferable, making reference to:
   - The natural monopoly characteristics of the system;
   - The competitive market potential for the project;
   - The utility's obligation to serve new customers; and
   - Rate setting mechanisms that encourage public utilities to increase efficiency, reduce costs and enhance performance.

Creative Energy submits that it assessed the rate setting mechanisms of other Stream B projects and was "informed" by the rate setting mechanism of the Creative Energy Steam Service. The Panel accepts this but notes the evidence put forward by Creative Energy does not follow the form set out in the TES Guidelines and does not specifically address all of the points set out therein. However, the Panel is persuaded that consideration was given to other rate setting approaches and there is no evidence to suggest a COS approach is inappropriate**.** Additionally, the Panel finds it would promote regulatory efficiency if CE is able to manage both the Steam Service and the NEFC Service under a common methodology. Given these circumstances the Panel is not persuaded there is justification for delaying a determination on NEFC Service rates and requiring further review of other potential rate setting alternatives.

The Commission notes that the TES Guidelines state:

> These Guidelines are intended to be as general as possible with respect to the information required. If an Applicant is of the view that any guideline(s) are not applicable, the Applicant must provide explanations why it is considered not applicable.[21]

Although the NEFC portion of the Application and supporting evidence does not meet all of the requirements as set out in the TES Guidelines, the Panel finds that sufficient evidence has been provided to generally satisfy their intent. The Panel notes that FAES was the only intervener that raised concerns with Creative Energy meeting the TES Guidelines.

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[21] Order G-27-15, Appendix A, p. 21.

2.2 Opportunity to earn approved returns

Creative Energy asserts that recent regulatory Decisions have resulted in returns not meeting the fair return standard (FRS). Specifically, CE claims the recovery of costs related to the transition to new owners was denied in 2015. As a consequence, the "impact of the 2015-17 RRA Decision together with loads being less than forecast resulted in a return of only 5.74% and 4.71% in Test Period 2014 and Test Period 2015." Noting that the FRS applies during a transition to new ownership, CE further claims it was denied the recovery of costs related to the previous owner's contractual commitments and concludes "it is now time for the Commission to ensure a reasonable opportunity for the company to earn approved returns."[22]

Submissions

CEC takes issue with Creative Energy's assertions concerning recent Commission regulatory Decisions resulting in returns not meeting the FRS and submits they are inaccurate. Further, CEC describes the company's statements implying the Commission must at this time remedy a past situation or otherwise increase CE's opportunity to earn a return over what has been provided in the past as unreasonable. CEC submits the Commission is the judge of whether or not rates have met the FRS and there are no facts in evidence indicating it has not been met. CEC further submits that the present Application is forward-looking "and should not be examined in the context of past returns the particulars of which are not under consideration in this proceeding."[23]

None of the other interveners made submissions on this issue.

Creative Energy made no reply to the CEC submissions.

Commission discussion

The Panel finds that no weight should be given to Creative Energy's assertions that recovery of costs related to the transition to new owners was denied in 2015, and "it is now time for the Commission to ensure a reasonable opportunity." CEC has pointed out there are no facts in evidence to suggest the FRS was not met in previous Decisions nor has the matter been raised for consideration in this proceeding. The Panel agrees. The 2014 and 2015 ROE performance reported by CE can be related to a number of factors. Moreover, even if evidence had been introduced in this proceeding the Panel considers the time to question a Commission Decision has long since passed. If CE was concerned as to whether a particular Commission Decision met the FRS, it was free to have requested a reconsideration of that Decision at that time. No such reconsideration application was filed.

[22] Creative Energy Final Submission, pp. 4-5.
[23] CEC Final Submission, p. 5.

2.3 Recovery of January 1, 2016 – March 31, 2016 Revenue Deficiency

The Application seeks approval for an increase in Steam Rates of 6.23 percent effective May 1, 2016. Creative Energy proposes to recover the January 1, 2016 to December 2016 revenue deficiency during the period from May 1, 2016 to December 2016, in spite of the Application being filed on April 1, 2016. CE explains the filing of the Application was delayed to allow incorporation of determinations from another Decision issued on December 8, 2015.[24] Creative Energy reports the portion of the deficiency related to the January 1 to April 30, of Test Year 2016 is $340,000.[25]

Creative Energy submits the application filing date has no bearing on or relevance to whether rates effective January 1, 2016 are unfair unjust and unreasonable and cannot legitimately be said to harm or cause harm to its customers. In support of its position CE argues that the issue of a delayed filing of an application was a matter that was considered by Order G-70-06. In that instance BC Hydro filed an application less than 30 days prior to the first day of the test period and the Commission in its Decision accompanying the Order, concluded the filing date had no bearing on, or relevance to, the relief granted and should not be sanctioned. In the BC Hydro proceeding interveners argued their interests were affected adversely by the filing date.

CE points out in this proceeding that none of the interveners expressed opposition to recovery of the full revenue deficiency from January 1, 2016 to December 31, 2016 and none has proposed a reduction related to the filing date. From this CE concludes that a full recovery of the year's rate increase is assumed.[26]

Creative Energy describes the issue as being whether it can or should "be denied a reasonable opportunity to earn a fair return on invested capital" by sanction based on filing date only. It submits that such a sanction should be considered only where harm to customers could be shown and in this case none of the customers have claimed harm. Creative Energy explains that because of the importance of the NEFC Decision of December 8, 2015 and relevance to its application, the late filing date led to a more efficient regulatory process than would have occurred had the Application been filed in a timely fashion. Moreover, the late filing did not disadvantage customers for reasons of "uncertainty, planning or an unexpected bill" as noted in Order G-70-06.[27]

As noted by Creative Energy, none of the interveners made submissions on this matter.

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[24] Exhibit B-1A, p. 7.
[25] Exhibit B-11, BCUC IR 1.3.8.
[26] Creative Energy Reply Submission, pp. 4-5.
[27] Creative Energy Final Submission, p. 5.

Commission determination

The Panel notes that the British Columbia Hydro and Power Authority (BC Hydro) proceeding referred to by Creative Energy dealt with a late filing for interim rates as claimed. However, in our view, the BC Hydro application resulting in Order G-70-06 and accompanying Decision is based on a situation that differs from the current circumstance. In the BC Hydro Decision, the application was filed on March 15, 2006 seeking approval of interim rates effective April 1, 2006.[28] The fact that the BC Hydro application was filed 15 days in advance of the effective date and not 30 days is not the issue. The issue is whether BC Hydro was requesting to recover a revenue deficiency for a period prior to the application filing date, and it was not. This distinguishes it from this Application.

In this instance Creative Energy is requesting to recover a deficiency for a three-month period prior to the Application being filed. Given this distinction in circumstances, Order G-70-06 provides no support for CE's argument in the present circumstances other than it should be entitled to the deficiency between April 1, 2016 (the date it filed the Application) and May 1, 2016 (the effective date of rate increase).

The Panel considers the request to recover the deficiency for a period approximately three months previous to the filing of an application for rates is retroactive ratemaking which is prohibited. The fact that neither customers nor interveners have claimed harm or whether actual harm has occurred has no bearing on this determination. What is important is the Commission has the authority under law to set rates on a prospective basis only and has no authority to allow recovery on a retroactive basis. **Therefore, Creative Energy is given approval to recover the revenue deficiency for the period subsequent to the date the Application was filed. The Panel denies recovery of the revenue deficiency related to the period of time from January 1 to March 31, 2016.**

The Panel accepts that circumstances related to the timing of a Decision that had an impact on the timing of the filing of this Application. However, this did not preclude the applicant from providing a preliminary application with a request for interim rates in a timely fashion. This was not done.

2.4 Cost Allocation Methodology

In the CE 2015-2017 RRA, the Panel identified two issues related to cost allocation: whether cost allocation from the core business to the NEFC project is appropriate and whether the cost allocation to capital within the core business is appropriate. Creative Energy was directed to file a cost allocation methodology within 24 months addressing resource sharing, cost allocation policies and concerns raised by that Panel on the potential for cross subsidization. It was also directed to file a capitalized overhead study in its next RRA outlining its policies with respect to the allocation of costs from Operation and Maintenance (O&M) to capital. In the view of this Panel cost allocation methodology remains an important issue.

There are three areas directly impacted by Creative Energy's cost allocation methodology; the method for allocating steam costs to NEFC, other costs assigned to NEFC, and the allocation of Creative Energy's total labour capitalized to Steam Service, NEFC Service and CE's other projects. These, in effect summarize CE's cost allocation methodology.

[28] Order G-70-06.

Steam cost allocation to NEFC

For the production of hot water, NEFC's will receive steam from the Steam Service network. Creative Energy submitted a proposal for a cost allocation methodology between Steam Service and NEFC Service as part of the Application. By letter of June 7, 2016, CE submitted an errata to the Application which states that after further consideration of its allocation methodology it is now proposing that NEFC be treated as a Steam Service customer and base the cost of steam to NEFC on Steam Rates.

Creative Energy notes that in the NEFC CPCN Decision the Commission did not approve cost allocation methodologies for production and distribution costs. However, the Commission did approve the principle of cost allocation from the core business without approving specific allocation rates. CE submits that the use of Steam Rates to determine NEFC Service rates and Steam Service rates is both appropriate and consistent with the NEFC CPCN Decision.[29]

Creative Energy reports that the change in allocation methodology to rely on the use of Steam Rates to determine NEFC Service's revenue requirement has resulted in an increase to Steam Rates from 6.23 percent to 7.15 percent in 2017[30] but has not changed NEFC's Rates because of the RDDA. CE believes this methodology to be appropriate given there are existing customers taking volumes of steam similar to amounts required to serve NEFC. Further, the move to a Steam Rate methodology will hopefully address concerns raised with respect to initial allocation methodology being too complex in consideration of the size of NEFC's 2016 and 2017 demand.

CEC accepts that it is reasonable to apply Steam Rates to NEFC. BCSEA-SCBC also supports this approach pointing out that it is simple and fair to both NEFC and other Steam Service customers.[31]

Costs assigned to NEFC

Creative Energy reports, what it refers to as direct assignment costs include; depreciation, earned return, direct O&M costs such as maintenance of assets, direct administration costs, municipal access fees and related items. NEFC direct assigned costs are summarized in Table 2, and total $273,400 in 2016 and $1,029,800 in 2017.[32]

Table 2
NEFC ASSIGNED COSTS[33]

Operation & Maintenance Expense	89,000	176,000
Municipal Taxes	1,800	10,300
Other		
Total Operating and Maintenance Expense	143,800	500,300
Property Taxes	0	0
Income Tax Expense	0	27,300
Depreciation Expense	0	177,800
Depreciation Expense Allocated to Non Reg	0	0
Amortization of CIAC	0	0
Amortization of Rate Base Deferred Expenses	0	0
Amortization of Non - Rate Base Deferred Expenses	6,500	6,500
Actual/Proposed Return on Rate Base	123,100	317,900
Cost of Services	**273,400**	**1,029,800**

[29] Creative Energy Final Submission, p. 18.
[30] Errata letter to B-1A, Exhibit B-11, BCUC IR 1.9.2(ii).
[31] CEC Final Submission, p. 32; BCSEA-SCBC Final Submission, p. 11.
[32] Exhibit B-1A, pp. 60-61.
[33] Exhibit B-1A, Appendix 9, Schedule 1.

Creative Energy states that it uses the incremental approach to assess whether costs should be treated as directly assigned costs. Only costs that would have been incurred "if such costs would only have been incurred if load in NEFC was served by Creative Energy" are assigned to NEFC although some management salaries are assigned directly.[34]

Submissions

BCOAPO submits that it is normal expectation for a new class of service making a connection to an existing system to pay for the incremental cost as well as directly assignable costs and a contribution to the existing system. However, as a practical matter for this Application, BCOAPO accepts that CE has not proposed any system contribution for NEFC noting that the small increase in load will have a small impact on Steam Rates. Further noting that CE proposes to file a five year revenue requirement for 2018 through 2023 and over time the impact will not be inconsequential, BCOAPO recommends the Commission require a cost allocation study prior to the next RRA.

BCOAPO also takes issue with CE's assertion that it uses the incremental approach to assess whether costs should be treated as directly assigned costs and costs are assigned only "if such costs were incurred if the load in NEFC was served by CE." In BCOAPO's view, any appropriate direct costs should be assigned to NEFC but in addition, there should be an assignment of system costs to each rate class. In addition, BCOAPO asserts that "rates should always be between incremental costs and stand-alone costs." CE's approach seems to imply that cost causation and responsibility can be determined solely on an incremental basis. However, the utility will not recover its revenue requirement if costs are assigned on an incremental basis for all rate classes since fixed costs don't vary and nobody incrementally causes them.

BCOAPO contend that a problem is created by CE's change in allocation methodology to use Steam Rates to determine the NEFC's revenue requirement. A cost allocation involving non-assignable and non-incremental costs result in lower Steam Rates and thus, CE's proposal involves subsidization to NEFC's customers by existing Steam Service customers.[35]

CEC indicates it has reviewed the costs assigned directly to NEFC and does not object to them at this time.[36]

Creative Energy disagrees with BCOAPO's submission that there is no proposed system contribution from NEFC customers. CE argues that such costs are embedded in Steam Rates and therefore NEFC customers contribute to the cost of the Steam system. CE disagrees with BCOAPO's assertion that the changed cost allocation methodology results in a problem. Contrary to BCOAPO's view that this is evidence of NEFC subsidization, Creative Energy asserts "both Hot Water service customers and Steam service customers make a contribution to embedded costs and also pay directly assignable costs."[37]

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[34] Creative Energy Final Submission, p. 17.
[35] BCOAPO Final Submission, pp. 2-3.
[36] CEC Final Submission, p. 30.
[37] Creative Energy Reply Submission, p. 13.

Other Projects – allocation of capitalized labour

In addition to NEFC, Creative Energy has listed six unnamed additional projects (Other Projects) it will be working on that will involve a significant amount of management time. It appears that starting in 2015 some of management's time has been capitalized to these projects.

In 2015 management salaries of $729,720 were recovered through the O&M component of the Steam revenue requirements and $379,330 was forecast to be capitalized to Steam, NEFC and the Other Projects. However, $656,906 of management's time was actually spent on capital projects and therefore capitalized. Thus, $277,573 of management salaries that were recovered through Steam Rates were subsequently capitalized to NEFC and the Other Projects. Consequently, Steam Service customers paid for management time that in fact was not spent on Steam Service.

Creative Energy has forecasted $533,300 in 2016 and $562,000 for 2017 of managements labour to be capitalized. The remaining management salaries of $584,600 in 2016 and $617,900 in 2017 are being recovered through the O&M component of the revenue requirements with a small portion allocated to NEFC.

The allocation of time forecast to be capitalized to projects for 2016 and 2017 by executive position is outlined in Table 3 (detailing Table 2 in Appendix 7a).[38]

Table 3

Capitalize Management Labour

Table 2 – Detailed Breakdown By Individual By Projects by percentage

1	**2016 FORECAST - Charged Out to Projects**										
						Proj. 1	Proj. 2	Proj. 3	Proj. 4	Proj. 6	
2		Steam Div			NEFC	CPCN	Stream A				Total
3		Bld 1	Bld 2	Bld 3	Connect						
4											
5	Construction Mgr	10%	10%	10%	70%						100%
6	EIT				20%	50%	10%	10%		10%	100%
7	Pres					65%	10%	10%	5%	10%	100%
8	Finance					70%	10%	10%		10%	100%
9	VP CR&D					69%	11%	10%		10%	100%
0	Dir Eng				35%	35%	10%	10%		10%	100%
1	Ops Mgr	10%	10%	10%	70%						100%
2	Asst. Person	10%	10%	10%	20%	10%	10%	10%	10%	10%	100%
3											
4											
5	**2017 FORECAST - Charged Out to Projects**										
						Proj. 5	Proj. 2	Proj. 3	Proj. 4	Proj. 6	
6		Steam Div			Proj. 1	CPCN	Stream A			CPCN	
7		Cust 1	Cust 2	Cust 3	Connect						
8											
9	Construction Mgr	10%	10%	10%	70%						100%
0	EIT				20%	15%	15%	10%		40%	100%
1	Pres					65%	10%	10%	5%	10%	100%
2	Finance				5%	65%	10%	10%		10%	100%
3	VP CR&D					69%	11%	10%		10%	100%
4	Dir Eng				35%	35%	10%	10%		10%	100%
5	Ops Mgr	10%	10%	10%	70%						100%
6	Asst. Person	10%	10%	10%	20%	10%	10%	10%	10%	10%	100%

[38] Exhibit B-1A, Appendix 7a, Table 1 and Table 2.

None of the interveners made submissions on other costs or the allocation of capitalized labour.

Commission determination

The Panel approves the proposal put forward by Creative Energy to treat NEFC as a Steam Service customer charged on the basis of Steam Rates. This is a significant departure from CE's original proposal of allocating a portion of Steam costs to NEFC but the Panel notes it eliminates many of the issues in determining a fair cost allocation of Steam Service cost creating regulatory efficiency. Moreover, charging NEFC for steam based rates is not unreasonable as costs attributable to NEFC relating to steam production are embedded in Steam Rates as outlined by Creative Energy. However, while the Panel considers it appropriate to charge NEFC as a Steam Service customer, there are issues related to CE's specific proposal for the calculation of a Steam Rate for NEFC. These are addressed in Sections 3.1 and 5.3.

While moving to this new treatment, NEFC's use of steam eliminates some of the issues it does not address the broader issue of shared resources and how they are allocated. The Panel remains concerned with the cost allocations proposed by Creative Energy and whether its proposal accurately reflects a fair and reasonable allocation of shared costs. Specifically, the Panel is concerned that CE has failed to provide an adequate explanation of how the various allocations are arrived at, and whether all areas that should allocate a part of their costs are included in these allocations. Creative Energy is going through a major transformation and with the number of projects it has in process, there is a need to review how costs are allocated for each of these initiatives to ensure existing Steam Service customers are not treated unfairly. A concern was also raised by BCOAPO who recommends that CE be required to conduct a cost allocation study prior to the next RRA. The Panel agrees. An example, which highlights the need for such a study, is the 2015 capitalized labour allocation to NEFC and Other Projects for management. This resulted in Steam Service customers paying for costs that were later capitalized to NEFC and possibly the Other Projects thereby disadvantaging Steam Service customers.

The Panel acknowledges that any cost allocation study needs to be conducted in a cost effective manner in keeping with the size of the business**. With this in mind, Creative Energy is directed to conduct a cost allocation study addressing allocations among Steam Service, NEFC Service and Other Projects and file it with the Commission no later than the date of its next Steam Service or NEFC Service RRA.**

The Panel approves the forecasted capitalized labour allocation of $533,300 in 2016 and $562,000 for 2017 as proposed by Creative Energy. The Panel notes these amounts appear to have been planned in a reasonable fashion and are reflective of forecasted requirements. To eliminate the possibility of capitalized labour costs exceeding approved amounts, CE has no approval to exceed the capitalized labour amounts in 2016 and 2017 as set out above for regulatory purposes.

In its review of the total revenue requirements, the Panel has considered the proposed NEFC cost allocations for each cost category. These will be addressed in Sections 4.0 and 5.4.

2.5 Quality of Application

The Panel has experienced considerable difficulty interpreting the information provided in Creative Energy's Application as well as its updates and informational changes. This has resulted in the Panel spending an unreasonable amount of time scanning the Application, errata's and IRs to determine whether the evidence it is relying on is accurate and the most recent.

A major factor contributing to the problem is that Creative Energy's Application combined Steam Services and NEFC Services (two separate classes of service) in a consolidated fashion leading to numerous staff IRs requesting specific information for each entity. This has resulted in key tables and schedules in the original Application, updates to the Application, errata's and IRs being scattered throughout the evidentiary record. Making matters even more difficult is that many of the additional informational submissions were in a different format than the original schedules and tables.

The Panel urges Creative Energy prior to its next RRA to consult with Commission staff prior to preparing its application to avoid time being unnecessarily spent searching for the latest and most correct information. At the very least, Steam Services and NEFC Services should have separate regulatory schedules and should be separated within the application with information related to each being clearly laid out. In addition, to the greatest extent possible, items like deferral accounts should be kept separate and reported on separately as the different classes of service would suggest. Where circumstances dictate that information for Steam and NEFC be combined, the information should reside in Steam Services and be dealt with in the Steam Services revenue requirements.

3.0 STEAM DEMAND FORECAST

3.1 Steam Service customer sales forecast

CE forecasts a demand of 1,067,999 thousand pounds (M#) of steam for its Steam Service customer sales in 2016 and 1,069,572 M# in 2017.[39] Table 4 below shows recent historical demand and forecast demand in M# and the equivalent in megawatt hours (MWh). CE explains that the main driver of the decrease in actual demand between 2011 and 2015 is likely the change in heating degree days (HDD) and that actual Steam Service demand for 2015 was lower than expected due to it being one of the warmest years on record in Vancouver.[40]

Table 4
CE Steam Customer Demand[41]

CE Steam Customers	2011	2012	2013	2014	2015	2016	2017
	Actual	Actual	Actual	Actual	Actual	Forecast	Forecast
Demand (M#) '000s	1,226	1,173	1,141	1,058	973	1,068	1,070
Demand (Mwh) '000s	423	405	394	365	336	368	369

[39] Exhibit B-11, BCUC IR 8.1.
[40] Exhibit B-1A, pp. 18-19; Exhibit B-11, BCUC IR 6.2.
[41] Exhibit B-11, BCUC IR 8.1.

For existing Steam Service customers, CE used historical monthly consumption and HDD data to estimate weather normalized historical demand for the winter months. No weather normalization was made for the months of May to September, as CE explains that in these months demand is primarily for hot water load end-use, and is not weather dependent. Monthly demand data was aggregated to determine five years of annual consumption data which was then used to determine a baseline annual consumption for each customer. The baseline consumption was used with the HDD forecast to produce a demand forecast for each steam customer for the 2016 and 2017 test periods.[42]

After contacting the largest customers representing 47 percent of total Steam Service demand, CE adjusted the demand forecast for some of these customers due to changes such as building upgrades, changes in the type of tenants, changes in operation or the addition of on-site energy sources.[43] CE also adjusted the demand forecast for some customers who were not contacted, but whose consumption data from prior years indicated step changes in weather-normalized demand, suggesting building upgrades or modifications in operations that had impacted demand.[44]

CE forecasts three customer additions to Steam Service in 2016: an office building, a residential building and a school. For these new customers with no historical demand, CE developed demand forecasts based on the energy-use-intensities (EUIs) of comparable new buildings and end-uses, current envelope standards and other unique considerations (such as on-site heat sources).[45] These three customers represent 0.26 percent of the 2016 forecast steam customer demand.[46]

3.2 NEFC Steam forecast

In the third quarter of 2016, CE is to begin providing service to NEFC. For the 2016 and 2017 test periods, NEFC's hot water system will be supplied entirely from the existing Steam Service network via two central steam-to-hot water converter stations.[47] As there is no historical data, CE forecasts NEFC steam demand using a different methodology from its existing Steam Service customers. CE forecasts heat demand of 1,718 MWh and

[42] Exhibit B-1A, p. 18.
[43] Ibid.
[44] CE Final Submission, p. 9.
[45] Exhibit B-1A, p. 17 and 19.
[46] Exhibit B-11, BCUC IR 9.1.
[47] Exhibit B-1A, p. 5.

9,141 MWh for NEFC Service in 2016 and 2017 respectively.[48] Creative Energy then converts the units from MWh to M# since the NEFC Service will be supplied from the existing Steam Service customer network. Table 5 below presents the equivalent steam demand in M#.

Table 5
NEFC Steam Demand

NEFC Customer Demand Forecast	2016	2017
NEFC MWh	1,718	9,141
NEFC Steam Demand M#	**5,440**	**28,942**
Existing Steam Customers M#	1,067,999	1,069,572
Total Demand (NEFC + Steam) (M#)	1,073,439	1,098,514
NFEC Demand as a percentage of Total Demand[49]	0.51%	2.64%

3.3 Demand forecast issues

A number of forecast related issues were raised in this proceeding. These are:

1. the Steam Service load forecast methodology;
2. how NEFC's load should be used in the calculation of Steam Rates; and
3. Steam Service load forecast for 2016 and 2017 and the potential need for a deferral account.

3.3.1 Steam customer load forecast methodology

In the CE 2015-2017 RRA Decision the Commission noted the largest variance in forecast Steam Service loads was weather related, but CE did not employ a weather normalized approach to forecasting. In addition, the Commission expressed concern that CE produced a load forecast relying primarily on information gathered from individual customers that may contain a level of inherent bias to forecast higher than their actual needs to ensure reliability of supply. The Panel directed Creative Energy to review its forecasting methodology as past actual results indicate its customer survey method produced results that were too high.[50] The Commission Panel accepted the 2015 load forecast but directed CE to consider other methods of load forecasting in its next RRA and if the same customer survey method was employed, CE should consider adjusting it for any inherent bias.[51]

In the response to BCUC IR 5.1, CE compares the load forecast methodology used in the CE 2015-2017 RRA with the revised load forecast methodology used in this Application. CE acknowledged the previous top-down approach may have been prone to bias as it did not weather normalize historical consumption and did not involve systematically contacting customers to request information on previous or planned upgrades or other changes. CE states that the bottom-up approach used in this Application is more accurate than the previous top-

[48] Exhibit B-18, BCUC IR 70.1.1.
[49] Exhibit B-18, BCUC IR 102.5.
[50] CE 2015-17 Revenue Requirements Application Decision, p. 40.
[51] Ibid.

down, more ad hoc approach and reflects the complexity of forecasting demand in a small system located in one small geographic area that is sensitive to site-specific considerations and the decisions of a limited number of customers.[52] CE submits this new method of forecasting Steam Service demand should address an inherent bias in past forecasts.[53]

Submissions

Both BCSEA-SCBC and BCOAPO submit that CE's revised load forecasting methodology is an improvement over the previous method. BCSEA-SCBC further submits that it responds appropriately to the directive in the CE 2015-2017 RRA Decision.[54]

Commission determination

CE responded to the previous directive by incorporating weather normalization, and by obtaining information from significant customers regarding any pertinent changes to their building or operations that could impact demand. The Panel considers the changes to the load forecast methodology for steam customers to be reasonable and appropriate. **Accordingly, the Panel approves CE's revised load forecasting methodology as outlined throughout the evidence in this proceeding.** Going forward, the Panel expects CE to strive to continue to improve its survey response by aiming for information from customers representing more than the 47 percent of total Steam Service demand as was used to prepare the current load forecast.

The Panel also directs CE to include in its next revenue requirement application, information comparing the forecast, the approved and actual historical demand as presented in response to BCUC IR 8.1. This information will aid in the efficient review of the performance of CE's load forecast methodology.

3.3.2 How should NEFC's load forecast be used to calculate Steam Service rates?

Creative Energy initially requested a smoothed-rate increase in Steam Rates of 6.23 percent for each of 2016 and 2017 that was calculated based on the load demand forecast for Steam Service, which at that time did not include NEFC Service.[55] Under the updated methodology, steam production costs are no longer allocated to NEFC, rather Creative Energy proposes to account for NEFC by applying a credit to the Steam Service revenue requirement equal to NEFC's forecast revenues.[56] As noted in Section 1.2, CE updated the requested Steam Service rate increase taking into consideration the updated methodology resulting in a 6.23 percent increase in 2016 and a 7.15 percent increase in 2017.[57]

[52] Exhibit B-11, BCUC IR 5.1.
[53] Creative Energy Final Submission, p. 9.
[54] BCSEA Final Submission, p. 7; BCOAPO Final Submission, pp. 3-4.
[55] Exhibit B-1A, p. 21, Table 3.
[56] Exhibit B-11, BCUC 9.2(ii), Appendix 19.
[57] Exhibit B-18, BCUC IR 65.2.

Creative Energy confirmed that the Steam Service load forecast used to determine Steam Rates did not include NEFC's forecast load and stated that it should have been included, considering that NEFC will be treated as a customer of steam.[58] CE also provided a table in the evidentiary record that recalculated the Steam rate increases when NEFC's load was included a part of the Steam Service load forecast. The result was a decrease in the proposed Steam Rate increase from 7.15 percent to 4.43 percent in 2017 (on the assumption that the 2016 rate increase remained at 6.23 percent).[59]

Commission determination

Although the Steam Service rate increase calculated by Creative Energy is lower with the inclusion of NEFC's load, the calculation incorrectly double counted NEFC as a customer by including its forecast load as part of the Steam Service load forecast, and also as a credit to the Steam Service revenue requirement when only one of these methodologies need be applied. As a result, when taking into account NEFC's load, the Steam Service rate increase in 2017 would be somewhat higher than the 4.43 percent as calculated by Creative Energy. Nevertheless, the Panel determines that given NEFC is being treated as a customer of Steam the impact on Steam Rates should be accounted for as any other customer of Steam Service would be - which is through the load forecast and not as a credit to the revenue requirements as proposed by Creative Energy. **Therefore, the Panel denies Creative Energy's proposed treatment to include NEFC's forecast revenue as a credit to the Steam Service revenue requirements calculation in 2016 and 2017, and instead directs Creative Energy to account for NEFC as it would any other steam customer, through the inclusion of NEFC's load in the total Steam Service load forecast.**

3.3.3 Load Forecast for 2016 and 2017 and the need for a load forecast deferral account

Creative Energy is requesting approval for final Steam Rates for 2016 and interim rates for 2017. Creative Energy is not requesting final 2017 Steam rates stating "[o]n or before November 1, 2016, Creative Energy proposes to file a simplified application to update the 2017 demand forecast…[t]he simplified application would seek to make Steam Rates…final as of January 1, 2017."[60]

In its final Submission, Creative Energy points out that with just over 200 customers within a small service area, the decisions or circumstances of a single customer magnifies the outcome when compared to large utilities with thousands or millions of small customers. Creative Energy explains it takes substantial risk on costs and also weather-related demand and submits it is reasonable in these circumstances to establish a multi-year revenue requirement with a streamlined review of the load forecast and for these reasons proposes to update the load forecast before setting the final Steam Rates effective January 1, 2017.[61]

Submissions

BCSEA-SCBC and BCOAPO support Creative Energy's proposed approach to setting 2017 Steam Rates final based on updated load forecasts to be filed later in the fall.[62]

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[58] Exhibit B-18, BCUC IR 70.1, p. 16.
[59] Exhibit B-18, BCUC IR 70.3, pp. 17-18.
[60] Exhibit B-1A, p. 15.
[61] Creative Energy Final Submission, pp. 6-7.
[62] BCSEA-SCBC Final Submission, p. 5; BCOAPO Final Submission, p. 2.

CEC recommends the Commission determine the appropriate load forecast based either on the evidence in this proceeding or, if the Commission does not deem the evidence in this proceeding to be adequate, with additional compliance evidence filed at a later time.[63]

CEC also recommends the Commission reject Creative Energy's proposal to assume load forecast risk and instead establish a deferral account. CEC submits that CE's attempt to gain certainty by conditioning its load forecast on a future update is clear evidence of a need for deferral account treatment.[64] CEC further submits that given the load forecast's uncertainty, it is appropriate for a deferral account to be established to account for any variations in load.[65]

In reply, CE opposes the load forecast deferral account proposed by CEC on the basis that it would be a "significant departure from past practices" at Creative Energy and that the calculation of rates have, in the past, always been forward looking and based on forecasts.[66]

Commission determination

CE has introduced several changes to its load forecast methodology for Steam Service and will be adding a new load for NEFC currently under development. The Panel notes that 2016 will be the first year in which CE uses the new forecast methodology for Steam Service and there is uncertainty surrounding the timing of load to serve NEFC demand during the test periods. Based on this, the Panel is of the view that it would not be unreasonable to approve Creative Energy's proposal to set the 2017 Steam Rates as interim and make rates final after consideration of an updated 2017 load forecast. This proposal was supported by two interveners and was not opposed by other interveners. This will provide CE the opportunity to include more recent information, which could lead to more accurate forecasts and lower variances.

The Panel approves the total 2016 Steam Service demand forecast which includes the NEFC customer load as set out in the Table 6.

Table 6
Total Steam Demand Forecast

Steam Demand	2016	2017
Existing Steam Customers M#	1,067,999	1,069,572
NEFC M#	5,440	28,942
Total Demand (NEFC + Steam) (M#)	**1,073,439**	**1,098,514**

The Panel does not approve the total 2017 Steam Service demand forecast at this time but instead will allow Creative Energy to file, for approval, an updated 2017 steam demand forecast before the Commission sets the permanent 2017 Steam rates. However, the 2017 forecast must take into consideration the NEFC steam customer load.

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[63] CEC Final Submission, p. 3.
[64] CEC Final Submission, p. 6; Exhibit B-11, BCUC IR 1.3.1.
[65] CEC Final Submission, p. 8.
[66] CE Reply Submission, p. 6.

With regard to the deferral account proposed by CEC, the Panel notes that Creative Energy has operated without a load forecast deferral account in the past and prefer to continue with this past practice. Over the past years Creative Energy has consistently over forecast its load, resulting in rates being lower than otherwise would have been the case. This has resulted in Creative Energy having a lower return on equity than it otherwise would have been entitled to.[67] In the Panel's view, the changes made to improve load forecasts should serve to reduce the degree of uncertainty surrounding the 2016 and 2017 load forecasts. **The Panel determines the degree of risk and uncertainty surrounding the load forecast does not warrant the establishment of a deferral account at this time. For these reasons the Panel rejects CEC's proposal that a deferral account should be established to address load forecast risk.**

4.0 STEAM CLASS OF SERVICE – REVENUE REQUIREMENTS AND RATES

4.1 Introduction

Creative Energy's consolidated revenue requirements before allocation to NEFC for 2016 and 2017 is $9.069 million and $9.933 million respectively. Once the allocations for NEFC have been removed, the remaining revenue requirements for Steam Service are approximately $8.794 million for 2016 and $8.902 million for 2017.[68]

A summary of Creative Energy's proposed revenue requirements by cost category is attached as Appendix 1. This section will review each of the key cost categories and address any issues that are related to them.

4.2 Fuel expenses

Creative Energy has identified fuel as the company's single largest cost to be recovered from customers. As outlined in Table 7 forecast fuel expense for 2016 is $10,420,000 and for 2017 is $11,914,000.

Table 7
Fuel Expense Components[69]

FUEL EXPENSE COMPONENTS												
			Fortis Transportation									
Year	Data	Consumption (GJ)	Firm (GJ)	Interruptible (GJ)	Total Transportation Charges ($)	Natural Gas Commodity Costs ($)	Carbon Tax ($)	Ice Levy ($)	PST ($)	Clear Sky Joint Venture ($)	Backup Fuel Oil ($)	Total Fuel Expense ($)
2011	Actual	1,984,888	730,000	1,254,888		7,897,989	2,077,301	-	-	316,073		
2012	Actual	1,921,651	732,000	1,189,651		5,738,452	2,462,701	-		248,003		
2013	Actual	1,836,099	730,000	1,106,099	$ 1,773,263	7,560,877	2,735,421	23,100	404,222	300,999	5,113	12,802,995
2014	Actual	1,747,788	730,000	1,017,788	$ 1,734,393	8,820,075	2,603,868	35,157	615,277	289,954	4,633	14,103,357
2015	Actual	1,640,655	730,000	910,655	$ 1,490,355	5,342,300	2,444,275	21,254	371,951	189,460	-	9,859,595
2016	Forecast	1,797,981	732,000	1,065,981	$ 1,644,781	5,468,015	2,678,633	21,746	380,559	226,691	- -	- 10,420,425
2017	Forecast	1,840,038	730,000	1,110,038	$ 1,763,493	6,658,081	2,741,288	26,504	463,812	260,354	-	11,913,531

[67] Exhibit B-11, BCUC IR 18.1.
[68] Exhibit B-11, BCUC IR 9.2(ii), Appendix 19.
[69] Exhibit B-11, BCUC IR 12.1.

Recovery through the Steam Tariff is made in two ways. A cost of $0.41 per one million Btu (MMBtu) of fuel consumed (Base Cost) is recovered in the base Steam Rate while the largest part of the costs are recovered through a Fuel Cost Adjustment Charge (FCAC). The Base Cost included in the revenue requirement is $748,000 in 2016 and $1,105,000 for 2017 with the balance of costs collected through a FCAC. [70]

4.2.1 Total fuel expense forecast methodology

Input fuel for steam production is primarily natural gas with fuel oil used in those instances where there are interruptions in gas delivery. Creative Energy reports forecast consumption of natural gas is based on the following:

1. The aggregate of Steam Service and NEFC Service demand forecasts; and
2. The gross up of aggregate demand forecasts for overall system efficiency to arrive at the forecast of natural gas required.

As outlined in Section 3.0, the estimate for the energy consumed to meet customer demand is 1,704,037 MMBtu for 2016 and 1,745,156 MMBtu for 2017. This includes NEFC demand scheduled to commence in 2016.

The company's fuel cost estimate is made up of a number of cost components each of which varies with the volume of natural gas consumption.[71] Key components include Fortis transportation charges, natural gas commodity price and a number of other fuel related expenses.

Fortis transportation charges

Under agreement with FEI, Creative Energy receives firm and interruptible service. CE has reserved 2,000 GJ/day firm capacity on Fortis' system with amounts in excess of this being treated as interruptible. Noting that any changes to delivery charges are outside of its control and represent a flow-through cost, CE's assumed delivery charges for 2016 and 2017 are summarized in Table 8.

Table 8
Delivery Charges[72]

	2016	2017
Basic ($/Month)	$3,664.00	$3,664.00
Admin ($/Month)	$ 78.00	$ 78.00
Pilot ($/Month)	$ 40.00	$ 40.00
Demand ($/GJ)	$ 10.95	$ 10.95
Transport Charge - Firm ($/GJ)	$ 0.57	$ 0.60
Transport Toll - Interruptible ($/GJ)	$ 0.86	$ 0.92

[70] Exhibit B-11, BCUC IR 9.2(ii), Appendix 19 and Exhibit B-1A, p. 31.
[71] Exhibit B-1A, pp. 24-25.
[72] Exhibit B-1A, p. 26.

Creative Energy reports that fuel transportation charges are approximately 13 percent of fuel expenses including both firm and interruptible transportation.[73] When asked whether there is a need to increase the 2000 GJ/day firm transportation capacity due to NEFC's forecast additions, the company reported that NEFC accounts for 0.54 percent of steam output which is negligible.[74] It also states "it does not believe there is any compelling reason to increase or decrease firm capacity."[75]

Natural gas commodity price

For preparation of this Application CE has used the January 15, 2016 forward gas strip prices of $3.02/GJ for 2016 and $3.60/GJ for 2017.

Other fuel cost expenses

In addition to the commodity price and transportation charges, fuel cost expenses is made up of a number of taxes and levies. These include carbon taxes, provincial sales tax (PST) and payments required to the Innovative Clean Energy (ICE) Fund. Carbon taxes are non-discretionary and have been set at $1.49/GJ, PST at 7 percent of the gas purchase costs and the ICE levy a further 0.4 percent of gas purchase costs. In addition, Creative Energy has a contract with Clear Sky Energy Ltd. to provide and maintain energy conservation equipment designed to reduce energy use. By agreement Creative Energy keeps 25 percent of the resulting energy savings. The amount to be remitted to Clear Sky Energy is estimated at $227,000 for 2016 and $267,000 for 2017.[76]

Submissions

CEC indicates it is satisfied with the fuel expense forecast to the extent the load forecast is approved.[77] BCSEA-SCBC does not disagree with Creative Energy's position on the need to increase or decrease firm delivery service. However, it notes that if CE's implementation of a low energy source is delayed it may explore how an increase in firm gas service would impact the use of fuel oil and resultant Green House Gas emissions in a future RRA.[78]

Commission determination

The Panel approves the forecast methodology. Notwithstanding the issues related to the demand forecast discussed in Section 3.0, there has been no evidence to suggest the methodology CE uses to forecast its fuel expense is inappropriate or needs to be changed. In addition, none of the parties have argued in favour of increasing firm capacity as the impact of NEFC is minimal at this time.

The Panel also approves the total forecasted fuel costs of $10,420,425 in 2016 and $11,913,531 for 2017. As noted in Section 3.0, the 2017 Steam Service load forecast has not yet been approved. However, the Panel accepts that customers are protected from forecast variances through the FCSA. The handling of the FCSA account will be addressed in Section 4.2.3.

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[73] Exhibit B-1A, p. 26.
[74] Exhibit B-11, BCUC IR 13.2.
[75] Creative Energy Final Submission, p. 16.
[76] Exhibit B-1A, pp. 26-27.
[77] CEC Final Submission, p. 13.
[78] BCSEA-SCBC Final Submission, p. 10.

4.2.2 Recovery of Base Cost

As noted in Section 4.2, the Base Cost included in the Steam Production and Operations component of the revenue requirement is $748,000 in 2016 and $1,015,000 for 2017. This is based on a calculation of $0.41 per million # BTU of fuel. **The Panel approves these calculated amounts to be recovered through the revenue requirements.**

The Panel notes the remaining portion of fuel costs of $9,672,000 in 2016 and $10,899,000 in 2017 are recovered through the FCAC in Creative Energy's Steam Service Tariff.[79]

4.2.3 Management of the Fuel Cost Adjustment Charge and Fuel Cost Stabilization Account

Creative Energy states that it forecasts the FCAC to be $9.06 per M# in 2016 on the basis of the $9,672,000 fuel cost divided by the 2016 load forecast of 1,068,000 M# and $10.19 per M# in 2017 ($10,899,000/1,070,000).[80]

Any variance between the cost recovered through the FCAC and the actual fuel cost are recorded in the Fuel Cost Stabilization Account (FCSA) as follows:

> Amounts added to the FCSA = Total fuel costs – Amount recovered through the FCAC – Amount recovered through the Base Costs

Creative Energy states that it aims to maintain the FCSA with a balance of 10-15 percent of annual energy costs although in 2015 balances were below the 10 percent level.[81] The FCSA is not amortized and instead acts as a buffer. Creative Energy explains that it tracks and monitors the FCSA on a monthly basis and when it is outside of the 10-15 percent range; an adjustment is made to the FCAC. Setting of the FCAC acts to increase or decrease the balance in the FCSA and the objective is to provide cost stability for customers and not reduce the balance in the FCSA to zero.[82]

The FCAC currently does not require Commission approval. In the CE 2015–2017 RRA Decision the Commission noted concern with the FCAC and the FCSA and directed CE to propose a permanent treatment for the FCSA in its next RRA.[83] Specifically, the Commission directed CE to, at a minimum, address the following:

- Whether the account should be addressed as a rate base or non-rate base deferral account; and
- An appropriate means to compensate customers for interest to be accrued on excess customer billings and surplus balances with respect to fuel costs over actual cost incurred.

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[79] Exhibit B-1, BCUC IR 9.2(ii), Appendix 19, line 5, fuel recovery.
[80] Exhibit B-8, CEC IR 1.13.1.
[81] Exhibit B-11, BCUC IR 16.3; Exhibit B-18, BCUC IR 84.1.
[82] Exhibit B-11, BCUC IR 32.3; Exhibit B-18, BCUC IR 82.1.
[83] CE 2015–2017 RRA Decision, p. 24: "…The Panel further observes that, as illustrated by Graph 4.1, even with smoothing, there remains considerable volatility in fuel costs. Creative Energy also concedes that the Fuel Cost Adjustment charge is a large and important component of the overall cost of the steam service provided by Creative Energy and it significantly impacts customers.

The Panel notes that in spite of the significance of the Fuel Cost Adjustment charge portion of the customer bill, Creative Energy does not particularly attempt to forecast the natural gas component of the fuel costs. The Panel is concerned by Creative Energy's lack of attention to the potential combined impact of the requested Steam Tariff increases and changes to fuel costs over the test period."

The Commission at that time applied an interim measure whereby CE was directed to apply its WACD to the most current balance in the FCSA and apply it as an offset to the 2015 revenue requirements. The Commission also established a reporting regimen showing reconciliation of the FCSA up to the time of that Decision.

Creative Energy is requesting a more formal mechanism to track variances in the fuel cost recovery and to update the FCAC.[84] Specifically, Creative Energy seeks approval for the FCSA to be a non-rate base deferral account with carrying costs at the WACD. It proposes to apply its WACD to forecast monthly deferral account balances with an adjustment to be made the following year for any variances between the forecast and actual deferral account carrying costs and does not propose to amortize balances in the FCSA.[85]

Although Creative Energy proposes to call the FCSA a deferral account in the Application, it later confirmed that the FCSA would not function the way Commission approved deferral accounts typically function.[86]

CE's preference is to continue with this method in the future. However, if the Commission imposes a threshold for the balance, CE proposes the FCSA be permitted to hold a minimum of 15 percent of annual fuel costs before any excess amounts are amortized through a rate rider.

Creative Energy states it intends to follow reporting requirements as outlined in the CE 2015-17 RRA Decision. This involved the inclusion of an annual reconciliation report of the FCSA as part of its Annual Report to the Commission and a requirement to file schedules outlining details of any changes to the FCAC within 10 business days of a change.[87]

Creative Energy notes the Commission, in its CE 2015-17 RRA Decision, found there was no necessity for it to be required to seek approval of any changes it made to the FCAC. It believes this should continue and changes to the FCAC should not require Commission approval, as there has been no change in circumstances relevant to the FCAC warranting new regulatory requirements.[88]

Submissions

CEC agrees with establishing the FCSA as a non-rate base deferral account and also states there needs to be a threshold for the FCSA to ensure excessive balances are not accumulated. CEC points out that 10 percent of annual fuel expenses equates to a 10 percent increase in rates and considers this amount to be a sufficient threshold to reduce the need for frequent rate changes. Accordingly, CEC recommends the FCSA be established with a maximum 10 percent of 12-month fuel costs to be held with any excess amortized over two years.[89]

BCSEA–SCBC accept Creative Energy's explanation that the objective of the FCSA is "to provide cost stability for customers during times of fuel price volatility, not to reduce the balance to zero as might be suggested by an amortization schedule."[90]

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[84] Exhibit B-1A, Application, p. 7.
[85] Exhibit B-1A, pp. 23-24.
[86] Exhibit B-18, BCUC IR 85.3-85.4.
[87] Exhibit B-1A, pp. 23-24; Creative Energy 2015-17 RRA Decision, p. 26; Exhibit B-11, BCUC IR 32.2; Exhibit B-18, BCUC IRs 85.5 and 85.5.1.
[88] Creative Energy Final Submission, p. 16.
[89] CEC Final Submission, p. 27.
[90] BCSEA-SCBC Final Submission, p. 10.

Creative Energy believes FCSA balances should be managed by adjusting the FCAC as it has for 20 years, and there is no need for the Commission to approve a second deferral account with a fixed amortization schedule for this purpose. However, if the Commission concludes a second deferral account is appropriate, it needs to be permitted to hold at least 15 percent of 12 month fuel costs in the FCSA before any amounts are transferred to a new deferral account.[91]

Commission determination

Creative Energy's has stated it "that it does not believe that any new directions from the Commission related to either the FCAC or the FCSA are necessary"[92]and it should be allowed to manage fuel cost balances by making periodic changes to FCAC as it has done historically. The Panel disagrees. Historically these account balances are created by over collection of rates and it is appropriate that these balances be reduced and in part be returned in a more expeditious manner.

The Panel has two concerns with Creative Energy's proposal:

(i) Approval of the FCAC: Currently the Commission has no oversight of the full cost of fuel and does not set and approve the FCAC.

(ii) Amortization of the FCSA Balance: As stated, the balance in the FCSA has been created by over collection of rates. Currently, Creative Energy is free to decide on what action is appropriate with limited Commission oversight.

<u>Approval of the Fuel Cost Adjustment Charge</u>

Given that the annual fuel costs are in the $10 million range and this represents the single largest expense for CE, the Panel determines the current level of Commission oversight and approval is no longer appropriate. Further, the Panel finds it appropriate that the Commission approve the total fuel expense and set the FCAC going forward.

<u>Amortization of the Balance</u>

Creative Energy has stated that if the Commission concludes there is a requirement for a formal process to distribute outstanding FCSA balances by way of a rate rider, a threshold of at least 15 percent of the 12 month fuel costs in the FCSA needs to be exceeded prior to any excess balances being transferred to a deferral account. CEC has suggested this amount be reduced to 10 percent. Both of these proposed methodologies contemplate there being a balance remaining in the FCSA with only amounts in excess of this distributed to customers by rate rider. While there may be a need to set a modest threshold to signal when it is appropriate to return over collected funds to Steam Service customers, there is no need for that balance to be large or for a large ongoing balance to remain in the FCSA. Given these circumstances, the Panel finds that setting a maximum threshold of 5 percent of the 12 month fuel costs is appropriate and once this threshold is exceeded, positively or negatively, any excess amounts needs to be distributed to, or collected from, customers. Setting the maximum threshold at 5 percent provides balance between providing a means to smooth out rate increases yet doing so at a level that does not create serious problems with intergenerational equity.

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[91] Creative Energy Reply Submission, pp. 7-8.
[92] Creative Energy Reply Submission, p. 8.

Accordingly, the Panel determines there is a need to establish processes to manage the FCSA allowing it to function in a manner more typical of a Commission approved deferral account. Accordingly, the Panel directs the following:

1. **The base cost of 0.41 cents per one million Btu of fuel will continue to be recovered through the Steam Rate portion of the tariff until such time as the Commission approves an alternative handling methodology.**
2. **The remaining fuel cost for each test period will continue to be recovered through the FCAC**.
3. **The FCAC must be approved by the Commission and will be made up of the following two elements;**
   - **(i) the Fuel Cost; and**
   - **(ii) Amortization of the FCSA.**
4. **Starting January 1, 2017, the Commission will set the Fuel Cost for each year, as part of the revenue requirements application, as follows:**

   [(Total annual Fuel Cost forecast approved by the Commission in the revenue requirements application) – (annual $0.41 Base Cost recovered as part of the revenue requirements)] divided by (the Commission approved annual load forecast).
5. **Starting January 1, 2017, any positive or negative variances between forecast Fuel Costs and actual Fuel Costs (including any variance between the forecast and actual Base Cost volume), are to be captured in the FCSA.**
6. **The FCSA will have carrying charges at the WACD calculated on the mid-year balance. The carrying charges are to be added to the FCSA and not forecast as a credit to the revenue requirements.**
7. **Where the balance in the FCSA exceeds plus/minus 5 percent of the most recently approved 12 month forecast total Fuel Cost any amount in excess of this is to be distributed through the FCAC rate rider with an amortization period of two years.**
8. **The Panel sets the January 1, 2017, FCAC at $9.92** per M# **($11,913,531-$1,015,000/1,098,514) on an interim basis, pending the filing of the updated 2017 load forecast. If the balance in the FCSA exceeds the plus/minus 5 percent threshold at the time Creative Energy files the 2017 load forecast, it must propose an amortization of the FCSA excess balance to be included in the final approved FCAC.**
9. **The appropriate amortization of the FCSA is to be assessed by CE at June 30 and December 31 of each year. If the FCAC needs to be updated to reflect an update to the amortization of the FCSA, Creative Energy must file with the Commission, within 30 days of those dates, a request to change the FCAC. The information to be filed as part of the request should be in the same format as currently filed with the Commission and include the following;**
   - **the current FCSA balance as compared to the threshold set by the Commission;**
   - **the updated FCSA amortization calculation;**
   - **a breakdown of the FCAC between the updated FCAC amortization and the Commission set Fuel Cost; and**
   - **an explanation and calculation for all variance added to, or credited from, the FCSA.**
10. **Creative Energy must continue to include an annual reconciliation report of the FCSA as part of its Annual Report to the Commission as outlined in the CE 2015-17 RRA Decision.**

4.3 Water expense

Water is described as a major expense and consists of actual water costs and other water related expenses such as water delivery. Water is used for two primary purposes:

1. for feed water as an input in steam production; and
2. for water cooling applied to distribution condensate so that it can be safely discharged into City of Vancouver's (COV) storm and sewer network.

Creative Energy states its methodology for forecasting water expense is based on the historic ratio of actual water expense to actual demand for steam multiplied by the forecast demand.

Due to warm weather at the beginning of 2015 and a warm October that year the 2015 unaudited water expense of $900,222 was $45,503 lower than the 2015 approved expense. Looking ahead, forecast water expenses for 2016 and 2017 are $904,200 and $973,300 respectively. This reflects a 7 percent increase in 2017 to account for the expected increase in water rates and the anticipated demand, including the incremental cost of servicing NEFC.[93]

The water portion of the expense forecast for the years 2012-2015 has exceeded $500,000 with the actual water expense to actual demand ratio in a very narrow range of 42 to 44 percent. Creative Energy forecasts the water portion of the expenses at $468,900 in 2016 and $493,644 in 2017. These forecasts assume an increase of 4 percent each year in the price of water based on information provided on the COV website and the addition of 1 percent for inflation.

Submissions

CEC states the amounts forecast for water in 2016 and 2017 are not inconsistent with historical spending. Pointing out that it is unclear as to whether the inflation increase of 1 percent referred to 2015, CEC submits there is no need for the inclusion of an additional 1 percent and should be adjusted down to 4 percent if it was included in the 2017 forecast. CEC has recommended the Commission set water rates by a determination and followed by a compliance filing.[94]

In response to BCUC IR 1.17.4 Creative Energy states it "is investigating the opportunity to collect rain water for use to produce steam." BCSEA-SCBC supports and encourages Creative Energy's ongoing efforts to reduce its water usage.[95]

Creative Energy made no reply submissions on water expense.

Commission determination

The Panel notes that Creative Energy has established a methodology for forecasting water expense based on historic data where the results have proven to be accurate within a reasonable range. The only significant difference from past practice in determining its water cost estimate appears to be a further 1 percent inflationary water cost increase in addition to the 4 percent increase as provided by the COV. Creative Energy

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[93] Exhibit B-1A, p. 28; Exhibit B-8, CEC IR 1.16.2; Exhibit B-18, BCUC IR 87.1.
[94] CEC Final Submission, pp. 13-14.
[95] BCSEA-SCBC Final Submission, p. 8.

has provided no justification of why an additional 1 percent is required. **Given the lack of justification the Panel directs CE to reduce its actual water cost estimate by 1 percent and reflect a 4 percent increase only. The Panel approves Creative Energy's proposed water related expenses of $904,200 in 2016 and $973,000 in 2017 less the impact to remove the one percent from the water portion of the expense.**

4.4 Operation and Maintenance Expenses

Creative Energy has presented its Operations and Maintenance (O&M) budget in a format reflecting the primary functions broadly defined as follows:

- Steam Production;
- Steam Distribution; and
- Sales, General and Administration (SG&A)

Steam Production captures all of the O&M expenses related to producing steam at the CE's Beatty Street location. Included among these are fuel expenses and water related expenses as discussed in sections 4.2 and 4.3, and labour related costs. Steam Distribution includes all O&M expenses that relate to the operation and maintenance of the Steam Service network as well as the NEFC hot water distribution network. SG&A expenses include all remaining expenditures outside of Steam production and distribution including the following major items; management and general salaries and benefits, sales and marketing expenses, external services, insurance and building expenses.

Creative Energy has outlined its approach to employee compensation and has proposed an incentive program encompassing both management and employees as part of its Application. These will be addressed prior to an examination of expenses in each of the functional areas.

4.4.1 Employee Compensation

4.4.1.1 Approach to Compensation

Creative Energy states that its labour pool comprises two employee groups; management and unionized employees. Given the size of the organization it often has only one or two employees qualified for certain tasks and runs the risk of the loss of an employee having a significant impact on the business. CE has stated that its management compensation strategy is designed to strike a balance between being able to attract, motivate and retain top talent with the right skill sets while aligning a manager's responsibility to the level of compensation. Its policy is to offer competitive salaries and benefits for management especially those in key positions. For unionized employees working primarily in the production and distribution functions, labour cost increases are paid in accordance with a five-year contract expiring at the end of 2017. Wage and benefit increases for this group are 2.25 percent for both 2016 and 2017.

According to Creative Energy it has not recovered incentive plan payments to employees in the past but proposes to do so in this test period. This matter will be reviewed further in Section 4.4.1.2. It has retained the HayGroup to prepare a report benchmarking compensation and the related analysis “confirmed that management compensation at Creative Energy is no more and in some cases less than compensation to comparable positions in other companies.” The company believes the report confirms that management salaries including incentives are fair and reasonable and should be included in revenue requirements.[96]

None of the interveners made submissions with respect to Creative Energy’s approach to compensation or the HayGroup report.

Panel discussion

The Panel accepts the findings of the HayGroup Compensation Benchmarking Report (HayGroup Report). The Panel notes that the information filed by Creative with respect to the report is informational and provides no conclusions. It relies on information provided by 38 Canadian utilities and organizations participating in a benchmarking exercise where compensation benchmarking is based on job size vs. title match. The Panel notes there was no further evidence presented as to how close a match the participants in the exercise were to Creative Energy.[97]

4.4.1.2 Management and Employee Incentive Program

As noted, Creative Energy proposes to recover in rates the cost of its management incentive plan, also referred to as management bonuses. Creative Energy submits the incentive plan is important in enabling it to attract and retain talented employees critical to its business, in an environment where it competes for skilled employees with other larger utilities in BC and elsewhere. The Haygroup Report indicates that offering incentives is commonplace among the utility sector nationally. In addition, based on the information provided, Creative Energy lags behind its comparators in terms of both the potential for incentive earnings and where they do exist, the size of potential bonus payouts.[98]

The proposed incentive plan would provide a cash bonus of up to 5 percent of base salary for all full time employees, with the exception of the President and CEO who is entitled to a cash incentive of up to 18 percent of base salary. The incentives are not guaranteed and therefore may not be paid out in full, or at all, in any year.[99]

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[96] Exhibit B-1A, pp. 28-30; Creative Energy Final Submission, p. 10.
[97] Exhibit B-1A, Appendix 7, 7a and 7b.
[98] Exhibit B-1A, pp. 28–30, Appendix 7a.
[99] Exhibit B-11, BCUC IR 24.15; Exhibit B-18, BCUC IR 90.1.

None of the proposed management bonuses have been directly allocated to NEFC in 2016 and 2017.[100] Nor have any of the proposed bonuses been allocated to the Other Projects which are part of Creative Energy's ongoing business. As to why none of the bonus is allocated to the Other Projects, Creative Energy stated:

> The incentive plan is based on performance targets that relate to specific accomplishments that do not include all the activities of management. And as the quoted information request states, the recovery of bonuses should be as an O&M expense because it is dependent on performance in the year, and not necessarily activities to support capital projects.[101]

As to what percentage of the bonus calculation for each individual that directly benefits Steam and NEFC Service customers, CE stated:

> Creative Energy filed individual incentive plan objectives for all eligible employees in order to disclose the nature of the performance targets that have been established. All customers whether taking hot water service or taking steam service benefit from the commitment of employees to the success of Creative Energy and the development of new thermal networks and the achievement of performance targets established by the CoV. So it is not possible to identify by individual the percentage of the bonus that directly benefits a hot water service customer.[102]

Further, in explaining why the majority of the bonus expense is forecast to be recovered from steam ratepayers, Creative Energy stated:

> Creative Energy believes that the connection of new customers for steam or hot water service is in the interest of all customers. Moreover, only a small percentage of the performance targets relate to efforts to "encourage growth of the company as a whole." For that reason, Creative Energy believes that it is appropriate for the majority of the bonus to be recovered from Steam ratepayers.[103]

Submissions

BCOAPO does not support approval of CE's proposed incentive plan because it has not filed any evidence demonstrating that the incentive plan would benefit ratepayers without unduly increasing costs. In particular, it notes the disparity between the 5 percent bonus potentially payable to the majority of Creative Energy employees and the 18 percent bonus potentially payable to the President and CEO. In BCOAPO's submission, any bonus that is approved should be modest and equitable across the company.[104]

CEC does not specifically oppose the proposed management incentive plan, but does note that the forecasted incentive payments are $89,540 in 2016 and $90,022 in 2017 amounting to approximately 8.5 percent of management salaries.[105] It further notes that none of the management bonuses have been directly assigned to NEFC. CEC submits that the costs of the management bonuses should be allocated in the same proportions as the management salary costs so that NEFC is assigned a suitable portion of those costs.[106]

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[100] Exhibit B-18, BCUC IR 90.3.
[101] Exhibit B-18, BCUC IR 90.2.
[102] Exhibit B-18, BCUC IR 90.4.
[103] Exhibit B-18, BCUC IR 90.5.
[104] BCOAPO Final Submission, p. 4.
[105] Exhibit B-8, CEC IR 17.1-3.
[106] CEC Final Submission, p. 10.

CEC also submits that if the bonus is not paid out in full, any difference should be placed in a deferral account and used to offset future bonus payments.[107]

BCSEA-SCBC takes no position and FAES made no submissions in respect of Creative Energy's proposed management incentive plan.[108]

In its reply, Creative Energy submits that the evidence supports the conclusion that the incentive plan is fair and the cost is reasonable. Without the incentive plan, CE submits its compensation is demonstrably low, which will hurt retention and recruitment.

Creative Energy also does not support the incentive plan deferral account as proposed by CEC and submits that it is a significant departure from past practices and it is not aware of any other utility with such a deferral account. It argues that the balance in the deferral account is unlikely to exceed $30,000, which is the difference between 6 percent and 8.5 percent of management salaries.[109]

Commission determination

The Panel considers there to be a number of questions raised by Creative Energy's proposed management and employee incentive program. They are as follows:

- Are the proposed maximum payout amounts of 5 percent of base salary for all employees and 18 percent for the President/CEO reasonable and do they benefit ratepayers?
- Do all the established performance targets for the President/CEO benefit ratepayers?
- Should the full amount of potential incentives be included in the forecast?
- Is there a need for a deferral account to manage incentive plan forecast variances?
- Should a portion of forecast incentive payouts be allocated to NEFC and Other Projects?

<u>Proposed Incentive plan payouts and ratepayer benefits</u>

Creative Energy's position is that having an incentive plan is an important enabler in attracting and retaining employees and points out that it competes against larger BC utilities and other industries for its skilled employees. The Panel agrees. The HayGroup Report confirms that incentive programs are commonplace among Canadian utility comparators and where they are currently being offered at CE, the total potential incentive earnings are lower than what other competitive utilities offer. Therefore, the Panel accepts that the introduction of an incentive program with the proposed potential maximum earnings is reasonable.

[107] CEC Final Submission, pp. 9-10.
[108] FAES Final Submission and BCSEA-SCBC Final Submission, p. 8.
[109] Creative Energy Final Submission, p. 9.

BCOAPO has questioned the lack of evidence demonstrating that incentive plans benefit ratepayers and argues that if there is an approved program, it should be modest and equitable across the company. The Panel does not agree. As stated, Creative Energy has filed evidence in the form of the HayGroup Report clearly showing that not only are incentive programs common but also the potential for incentive earnings is higher among Canadian comparator utilities than what Creative is proposing. This report also demonstrates it is commonplace to offer higher percentage earnings to higher-level positions in comparator utilities. Therefore, it would not be unreasonable for a CEO to expect to earn a higher incentive percentage earnings potential than those performing other roles in the organization.

In the view of the Panel it is important that Creative Energy be able to offer an attractive employment package if it is to attract and retain good employees. Moreover, approving this incentive plan will motivate employees to contribute to Creative Energy's overall objective of providing safe and reliable service. In addition, it further supports Creative Energy's objective of retention of its skilled management employees, thereby avoiding the disruptive impact a small utility can experience from the loss of such an employee which is a benefit to both shareholders and ratepayers.

Therefore, given CE's arguments and the evidence provided by the HayGroup Report, the Panel considers the proposed incentive plan payouts reasonable and offering them positively, impacts ratepayers.

<u>President/CEO performance targets – ratepayer benefit</u>

The Panel notes that a portion of the President/CEO performance targets is tied to the achievement of a targeted ROE. The Panel considers the achievement of a ROE target to be a benefit to shareholders and is not persuaded the ratepayer should be charged with the cost of offering this incentive. **The Panel directs CE to deduct ROE incentive amounts from its forecast and apply these costs to the account of the shareholder.**

<u>Inclusion of potential incentives in the forecast</u>

The evidence makes clear that the forecasted bonuses for 2016 and 2017 are not guaranteed. However, as proposed, Creative Energy will recover any unpaid incentive amounts from its ratepayers. The Panel notes that CE has acknowledged that full payouts are not guaranteed and have stated that any unpaid amounts are unlikely to exceed $30,000 or approximately 30 percent of maximum incentive earnings in a given year. Given these admissions, the Panel finds a reduction in forecasted amounts to cover incentive payouts is warranted and in our best judgement, 80 percent of the maximum bonus payouts are a fair and reasonable estimate of the amount that will likely be paid out in incentives in the test period. Therefore, **Creative Energy is directed to adjust the 2016 and 2017 forecast for incentive payouts to 80 percent of the maximum payout.**

<u>Need for a deferral account</u>

The Panel has determined that a reduction in forecasted amounts to cover actual incentives is warranted and has directed Creative Energy to reduce the amount forecast to 80 percent of the maximum incentive plan. **The Panel is satisfied this provision is sufficient to protect ratepayer interests and determines that a management incentive plan deferral account is unnecessary at this time.**

Allocation of incentive payments to NEFC and Other Projects

The Panel considers it reasonable to expect that Creative Energy will provide some of its employees with incentive plan performance targets for NEFC and Other Projects. However, there is insufficient evidence to provide adequate guidance to the Panel as to an appropriate amount to allocate to either NEFC or Other Projects. **To ensure this is addressed in future revenue requirements, Creative Energy is directed to address this in its cost allocation study**.

4.4.2 Steam Production Expenses

Table 9 summarizes Creative Energy's proposed expenses for steam production. Steam production expenses include fuel expenses and water related expenses as discussed in Sections 4.2 and 4.3.

Table 9
Steam Production Expense[110]

Production Expenses Account Name	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Approved	2015 Unaudited	2016 Forecast	2017 Forecast
Fuel Expenses	776,987	747,104	713,966	679,578	708,850	516,156	698,700	716,000
Steam Production-Operation								
Supervision and Labour	970,553	999,882	1,049,849	1,062,133	1,030,443	1,053,872	1,144,000	1,178,000
Steam Expenses (Water related)	803,754	910,797	884,415	924,623	945,725	900,222	904,200	973,300
Total Steam Production-Operation	1,774,307	1,910,679	1,934,264	1,986,756	1,976,168	1,954,094	2,048,200	2,151,300
Steam Production-Maintenance								
Structures and Improvements	10,644	8,262	4,552	12,473	6,300	3,576	9,200	9,400
Total Steam Production-Maintenance	10,644	8,262	4,552	12,473	6,300	3,576	9,200	9,400
Total Production Expenses	$2,561,938	$2,666,045	$2,652,782	$2,678,807	$2,691,318	$2,473,825	$2,756,100	$2,876,700

Supervision and labour are forecast at $1.144 million in 2016, an increase of 8.5 percent and $1.178 in 2017, an increase of approximately 3 percent. Creative Energy attributes the increase to the following:

- An increase in the collective agreement.
- The current market compensation for the new Chief Engineer being much higher than expected.
- Recruitment costs to hire the new Chief Engineer.

In addition, Creative has budgeted $9,200 in 2016 and $9,400 in 2017 for Structure Improvements. It explains that the 43 percent increase in these expenditures over 2015 is due to conflicting priorities and completion of Structure and Improvement projects was low on the list in 2015. However, there are several initiatives including repairs to rolling gates and the installation of LED lights that have been undertaken to date.[111]

Submissions

CEC submits it is generally satisfied with the total Steam Production Expense Forecast.

[110] Exhibit B-1A, p. 31.
[111] Exhibit B-1A, p. 31; Exhibit B-8, CEC IR 1.16.4; Exhibit B-11, BCUC IR 19.1.

Concerning Supervision and Labour, CEC submits an increase of $90,000 in 2016 and $125,000 in 2017 over the 2015 unaudited amount is significant for a single position and given the load forecast, there are no other reasons for the labour increase. However, it points out the compensation for the Chief Engineer position in the Compensation Benchmarking Report seems to indicate the salary being paid is appropriate and comparative to other utilities. CEC further suggests that for amounts over and above the amount for the Chief Engineer cost, increases for Labour and Supervision should be limited to no more than 2.5 percent. Looking ahead to 2017, CEC submits that costs should be reduced by any non-recurring costs related to the retirement and hiring of the Chief Engineer.[112]

With respect to Structure and Improvement Expenses, CEC submits that to the extent monies allocated in 2015 were not expended ratepayers should not be required to pay for them more than once. Accordingly, it recommends the forecast for these expenses be limited to $6,300 for 2016 and 2017.[113]

Creative Energy states that it is in agreement that the costs of recruitment of a Chief Engineer are unlikely in 2017 and it has not included any recruitment amounts in its 2017 revenue requirements.

Concerning Structure and Improvement expense, Creative states that CEC's argument fails to recognize that management needs to respond to differing circumstances and changing priorities. It considers the forecasts for 2016 and 2017 to be reasonable and should be approved.[114]

Commission determination

Supervision and Labour expenses have moved from $970,553 in 2011 to $1,053,872 in 2015 representing an increase of 8.6 percent over a four year period or slightly over 2 percent a year. In 2016, Creative Energy has proposed an increase of 8.5 percent ($90,128) based on the need to hire a Chief Engineer at a much higher rate than was previously paid, recruitment costs to conduct a search for the position, and an increase in the collective agreement. **The Panel is persuaded that the large increase in production expenses for the first year of the test period is reasonable and approves Supervision and Labour costs of $1.144 million for 2016.**

CE has proposed Supervision and Labour expenses for 2017 representing a further increase of approximately 3 percent over 2016. Given past history this increase would not necessarily be unreasonable. However, as CEC has pointed out, 2017 should reflect a reduction due to the elimination of non-recurring amounts related to the retirement and hiring of a new Chief Engineer and this has not occurred. As a result, the Panel concludes the actual percentage growth in expenses for 2017 is actually higher than 3 percent, and a reduction to account for non-recurring amounts in the 2017 forecast is warranted. **Accordingly, the Panel has reduced the proposed 2017 Supervision and Labour costs by $20,000 and approves an amount of $1.158 million for 2017**. This represents the Panel's best judgement as to an amount appropriate to cover the elimination of recruitment, and other non-recurring costs related to bringing on a new Chief Engineer in 2016.

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[112] CEC Final Submission, pp. 12-13.
[113] CEC Final Submission, p. 14.
[114] Creative Energy Reply Submission, p. 9.

The Panel accepts Creative Energy's explanation with regard to unspent Structure and Improvement expense amounts and approves forecast amounts of $9,200 and $9,400 respectively in 2016 and 2017. In the Panel 's view it is reasonable to expect there will be occasions when, due to circumstances, small projects will be put off to a later date just as there will be instances where items will arise requiring unplanned expenditures. Moreover, there is insufficient evidence to suggest that under spending in a given year and reforecasting unspent amounts in future years is widespread and is an identified problem. Therefore, the Panel considers approval of these small amounts resulting from under spending in previous years to be reasonable.

4.4.3 Steam Distribution Expenses

Table 10 summarizes the proposed expenses for Distribution.

Table 10
Steam Distribution Expenses[115]

	2011	2012	2013	2014	2015	2015	2016	2017
1 Distribution Expenses	2011	2012	2013	2014	2015	2015	2016	2017
2 Account Name	Actual	Actual	Actual	Actual	Approved	Unaudited	Forecast	Forecast
3 Distribution Expenses-Operation								
4 Supervision & Labour	252,184	369,484	354,299	366,071	526,622	475,908	455,000	467,500
5 Mains & Services	14,561	11,951	8,923	14,237	11,616	23,134	15,700	19,100
6 Other Distribution Operation	-	-	-	1,000	2,500	-	5,000	15,300
7 Transportation	15,294	17,605	17,779	10,032	15,600	14,102	24,000	24,500
8 Total Distribution Expenses-Operation	282,039	399,040	381,001	391,340	556,338	513,145	499,700	526,400
9 Distribution Expenses - Maintenance								
10 Mains & Services	43,763	33,540	29,273	29,616	40,800	57,968	66,000	67,000
11 Meters & House Regulators	106,115	128,048	90,614	142,874	112,712	109,541	112,100	114,300
12 Other Distribution Maintenance	413	460	-	-	450	-	-	-
13 Total Distribution Expenses-Maintenance	150,291	162,048	119,887	172,490	153,962	167,509	178,100	181,300
14 Total Distribution Expenses	$ 432,330	$ 561,088	$ 500,888	$ 563,830	$ 710,300	$ 680,653	$ 677,800	$ 707,700

As noted in Table 10 unaudited 2015 Steam Distribution Expenses are approximately $30,000 below approved amounts in 2015. Looking ahead, total distribution expenses are forecast to remain similar to 2015 in 2016, and are forecasted to increase by 4.4 percent in 2017. CE has forecast significant Mains and Services expense increases as compared to what was expended in 2012 through 2014, and explains that the need for preventive maintenance to extend the life of the system and avoid costly breakdowns increases as the system gets older. Where possible the company would like to do preventive maintenance twice a year as maintenance is less costly than having to undertake system repairs when something has gone wrong.[116]

Submissions

CEC considers preventive maintenance a worthy objective and raises no issues with respect to Distribution Expenses and related maintenance expenses.[117]

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[115] Exhibit B-1A, p. 31.
[116] Exhibit B-1A, pp. 31-32; Exhibit B-8, CEC IRs 1.19.2 and 1.19.3.
[117] CEC Final Submission, pp. 15-16.

Commission determination

The Panel approves Steam Distribution expenses of $677,800 in 2016 and $707,700 in 2017 as applied for by Creative Energy. The Panel finds amounts forecast for Supervision and Labour are reasonable and in line with recent expenditures, and the increase in Mains and Services maintenance is a prudent approach to controlling costs over the long term.

4.4.4 Sales, General and Administration Expenses

Table 11 summarizes the proposed Sales, General and Administration (SG&A) Expenses.

Table 11
SG&A Expenses

Sales, General & Admin Account Name	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Approved	2015 Unaudited	2016 Forecast	2017 Forecast
Sales Expense	25,217	14,970	34,650	38,064	56,460	58,315	67,300	70,200
Directors Fees	22,500	26,000	30,000	30,830	42,000	60,815	48,200	49,400
Admin & General Salaries	475,326	573,924	562,683	772,641	729,719	455,906	584,600	617,900
Office Supples & Exp	161,034	88,533	63,456	95,473	78,786	107,966	97,500	105,200
Admin & General Exp	-	-	-	12,071	9,180	18,874	10,800	11,000
Special Services	67,581	90,487	121,161	214,159	108,000	246,121	418,200	307,300
Insurance	84,815	83,789	83,363	86,854	106,600	105,466	114,100	123,900
Injuries & Damages-WCB	8,443	8,672	8,893	10,287	12,074	12,041	14,800	14,800
Employee Benefits	236,663	344,972	433,210	190,532	450,187	508,035	461,800	465,100
Sales, General & Admin	1,081,579	1,231,347	1,337,416	1,450,912	1,593,006	1,573,539	1,817,300	1,764,800
General Plant Maintenance	26,233	14,622	23,597	14,957	26,640	25,287	30,200	49,200
Operations & Maint. Expense	1,107,812	1,245,969	1,361,013	1,465,869	1,619,646	1,598,826	1,847,500	1,814,000
O&M Allocated to Capital	0	0	0	0	(15,459)	(18,000)	(19,700)	(20,100)
O&M Allocated to Affiliate	0	0	0	0	0	0	(22,000)	(19,500)
Total SG&A	$ 1,107,812	$ 1,245,969	$ 1,361,013	$ 1,465,869	$ 1,604,187	$ 1,580,826	$ 1,805,800	$ 1,774,400

Creative Energy has provided explanations of material variances among 2015 Approved, 2015 Unaudited, 2016 Forecast, and 2017 Forecast.

Sales Expense

In 2016 and 2017 Creative Energy forecasts sales expense to increase to $67,300 and $70,200 respectively. These amounts are significantly higher than the actual expenditures of $38,064 in 2014 and the unaudited 2015 amount of $58,315. CE explains the additional amounts are for trade shows/marketing and travel/conferences in 2016 and 2017. In support of these expenses, Creative Energy states it is necessary to participate in trade shows, affiliate with non-profit organizations and develop strategies and support materials to support its dynamic customer base as existing customers are looking at continuous improvement opportunities. CE states it needs to find unique ways to talk to and market to current customers as it is competing with alternative technologies, and to retain customers it needs to communicate why its core Steam system is the right choice.[118]

Of these amounts Creative Energy has allocated costs of $15,400 and $15,700 to NEFC in 2016 and 2017 respectively. CE states that these expenditures are related to NEFC and include Marketing collateral, social media, and website content that is specific to NEFC.[119]

[118] Exhibit B-1, Appendix 1, Schedule 15; Exhibit B-7, BCUC IR 21.1.
[119] Exhibit B-8, CEC IR 42.1.

Director Fees

Forecasted Director Fees for 2016 and 2017 are slightly less than $50,000. This is substantially higher than amounts expended in the 2011 through 2014 period but is $11,000 less than 2015 unaudited expenditures. Creative Energy reports that its Board of Directors has been meeting more often to ensure an orderly transition to what it describes as a more active company. This has resulted in higher Director Fees in 2015 than previous years, a trend it expects will continue into 2016 and 2017.[120]

Creative Energy has forecast cost allocations of $4,000 and $4,700 to NEFC in 2016 and 2017. CE states the Board of Directors provides direction to CE and covers the existing steam system, NEFC, and Other Projects CE is pursuing.[121]

Administration and General Salaries

Administration and General Salaries for 2015 on an unaudited basis were $455,906 which was 38 percent below what was approved for 2015. Creative Energy reports this was due to more resource time than expected being expended and capitalized to unanticipated projects such as the NEFC CPCN. Looking to 2016 CE proposes to increase the approved allocation of the Vice President (VP) Customer Relations and Development's salary and benefit amount from the 25 percent approved in the CE 2015-2017 RRA Decision to 35 percent. This position will be supporting the retention of Steam customers and focus on the connection of new buildings to the Steam Service business. CE considers this essential to maintain rates and add new customers and states there is a need for greater focus on core Steam Service retention in 2016 and 2017 as new technologies continue to compete with traditional service.[122]

As part of the update to its Application Creative Energy states that as directed, it continues to include 25 percent of the VP of Business Development position salary and benefit costs in Steam rates although this individual has left CE since the Application was prepared. CE states "the costs of providing those services are not expected to change" and this approach appropriately addresses concerns with resource sharing.[123]

Creative Energy forecast to allocate $1,500 and $6,000 to NEFC in 2016 and 2017 but provides little rationale for the allocation amount.[124]

Office Supplies and Expenses

Office Supplies and Expenses are forecast at $97,500 for 2016 and $105,200 for 2017. These are slightly less than unaudited 2015 actuals which exceeded forecast but are significantly higher than 2015 approved expenditures. The primary reason for over expenditures in office supplies and expenses in 2015 is related to computer expenses. Computer expenses in 2015 were $30,589, an amount approximately $10,000 greater than approved. These expenditures in excess of the approved amount are the result of relying on the use of a computer consultant company for information technology (IT). However, CE notes this would have cost more had it employed a dedicated IT employee to perform the work and, as a result, proposes similar expenditures of $27,768 in 2016 and $28,323 in 2017.

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[120] Exhibit B-1A, p. 32.
[121] Exhibit B-8, CEC IRs 42.1, 42.2, 42.3 and 42.4.
[122] Exhibit B-1A, p. 33.
[123] Exhibit B-18, BCUC IR 96.1.
[124] Exhibit B-8, CEC IRs 42.1, 42.2, 42.3 and 42.4.

Office expenses were slightly above approved levels at $20,493 in 2015, but are forecasted to grow to $23,150 in 2016 and $28,323 in 2017. Much of the increase relates to NEFC requirements where $4,250 is forecast for 2016 and $9,080 is forecast for 2017.[125]

Special Services

Creative Energy explains that Special Services, or third party costs, increased due to increased regulatory activity as well as an increased complexity and requirements of each regulatory activity. Costs charged to Special Services include;

- Participant funding;
- Direct costs of BCUC regulatory processes; and
- Legal and consultant fees to comply with regulatory requirements.

Special Services costs such as legal, audit and outside services were all higher than anticipated. Legal and outside services increased costs resulted directly from not having in-house expertise on human resource matters, contract review, and regulatory costs.

Pointing out that its predecessor company was subject to only “light-handed” regulation, Creative Energy acknowledges there is a need to comply with the UCA with increased regulatory oversight and reporting requirements. To assist in the management of these expenses, Creative Energy is seeking approval of a deferral account for all Special Services costs rather than assigning a specific deferral account to each regulatory process.[126]

Creative Energy forecasts allocations of $6,000 and $6,100 to NEFC in 2016 and 2017 but provides limited rationale in support of this allocation.[127]

Insurance

Creative Energy forecasts insurance expenses of $114,100 in 2016 and $123,900 in 2017. CE states that insurance was approved at $106,600 in 2015, and attributes its increased insurance expense to an increase in its forecast for construction work and revenues for NEFC. Stating that insurance costs are currently based on construction activity, CE adds that “In 2016, the mid-year is approximately 3 percent of the total gross capital and in 2017, this represents roughly 9 percent.” Creative Energy forecasts allocations of $4,100 and $11,900 to NEFC for 2016 and 2017.[128]

Submissions

CEC was the only intervener to comment on specific issues with respect to proposed Sales, General and Administration Expenses. CEC submits that expenditures in this category are 80 percent higher than in 2011 and are growing at a significantly larger rate than the utility load, and are too high in relation to service growth. With respect to specific accounts CEC makes the following comments.

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[125] Exhibit B-1A, p. 33; Exhibit B-1A, Appendix 8, p. 2.
[126] Exhibit B-1A, pp. 33-34.
[127] Exhibit B-15, CEC IRs 42.1, 42.2, 42.3 and 42.4.
[128] Exhibit B-11, BCUC IRs 22.4 and 22.4.1.

Sales Expense

Sales expense in CEC's view is on an unreasonably steep trajectory and it notes that marketing expenses should result in increased sales and rate reductions but this has not occurred. CEC points out rates have increased significantly since 2014 following a period of lower increases and rate increases resulting from overspending are more likely to cause customer reductions than reductions in marketing materials. CEC recommends a reduction in the Sales Expense budget to $50,000 until Creative Energy is able to show the resulting net benefits to Steam Service customers.

Director Fees

CEC submits that 2015 approved Director Fees were increased by 40 percent over 2014 levels and should not be increased further. CEC recommends that Director Fees be held at $42,000 for 2016 and 2017.

Administration and General Salaries

CEC submits it is not appropriate to increase the VP Customer Relation's salary and benefit allocations to Steam from 25 to 35 percent as proposed. CEC submits this position will continue to focus on the development activities externally and 25 percent is sufficient to address the issues identified.

Office Supplies and Expenses

CEC submits that IT expenses are significant and should return to a normalized level once transition and other project costs are complete. CEC notes Creative Energy anticipates further expenses requiring IT consultants for accounting projects but recommend the budget for 2016 and 2017 should be $23,000 which represents an amount approximately 15 percent greater than what was approved in 2015.

Concerning Office expenses, CEC submits that amounts attributable to Steam Service are reasonable but those incremental amounts charged to NEFC Service represent an unreasonable increase and should be reduced to $3,000. It recommends overall Office Supplies and Expenses to be $20,000 in 2016 and $23,000 in 2017.

Special Services

CEC notes that Special Services costs are quite high in general and should be reduced. While not identifying specific areas for reduction, CEC notes that RRA consultant fees are forecast to be $140,000 in 2016 and $48,000 in 2017 with nothing allocated to NEFC. CEC argues that the $100,000 forecast for rate design is excessive given that the CFO and the acting President/CEO have indicated they have prepared information for this application. CEC recommends approval of a deferral account for Special Services to address variances in third party accounts.[129]

Creative Energy takes issue with CEC's submissions. It notes that its two biggest drivers are Special Services and employee benefits. With respect to Special Services CE points out the size of service should relate to the style of regulation and initially proposed a process involving BCUC staff review only, with no interveners. CE states employee benefit increases of 2.4 percent in 2016 and 0.6 percent in 2017 are related to the pension plan valuation done in 2013.

[129] CEC Final Submission, pp. 16-20.

Concerning Sales Expense CE states it is proposing the increased amounts to support increased sales activities necessary to support and retain existing customers as well as new connections, and these activities benefit all customers. In addition, CE argues that while amounts are large in percentage terms, they are not large in absolute terms and should not be denied due to the percentage growth size.

Creative Energy notes it has already proposed to reduce Directors Fees to approximately $48,000 by scheduling fewer meetings, but does not recommend reducing them to $42,000 as suggested by CEC.

CE disagrees with CEC's characterization of 2015 IT costs as being transitional costs that should not be repeated when projects have been completed. CE acknowledges that IT projects for 2015 are completed but argues that it expects to continue IT system upgrades in 2016 and 2017. Potential new projects include conversion of its billing system from manual to electronic which is important given there is now two classes of service.[130]

Commission determination

As outlined in Table 11, Creative Energy proposes SG&A expenses of $1,805,800 in 2016 and $1,774,400 in 2017. These amounts are almost $200,000 greater than amounts expended in 2015, and in comparison to 2011 is almost $700,000 higher. The Panel accepts that Creative Energy is going through a period of transition from a company with one major product to a more complex entity with new products, a broader project base and more diversified customers. However, while it is important this be considered in reviewing revenue requirements, we must ensure existing Steam Service rates remain reasonable and expenditures are not growing at a rate that is unnecessarily high. Our review and discussion of issues raised follows.

<u>Sales Expense</u>

The Panel agrees with CEC that Sales Expense costs have been increasing steadily and note there is no evidence to suggest these additional costs have resulted in increased sales. We also note that in spite of CE's assertion that increased costs are required to communicate its message and retain Steam customers, it has presented no evidence to suggest that CE has recently lost customers or are in danger of losing customers in the near future. Nonetheless, the Panel understands that Creative Energy operates in a competitive environment and there is no guarantee that existing customers will continue to renew. Therefore, we accept there is a need to continue to place emphasis on retention of existing customers and finding new ones.

The Panel notes that Sales Expense forecasts include a provision to allocate over $15,400 in 2016 and $15,700 of the total expenditures to NEFC. While CE has provided no rationale explaining why these specific amounts are required, the Panel accepts that NEFC is a new business initiative and will require sales support. The Panel also notes that when the proposed NEFC expenditures are allocated, the forecast Sales Expense to support the core Steam business are a slight reduction from both 2015 approved and actual expenditures. **Therefore, given the identified need to place emphasis on retention and growth in the core Steam business, the Panel approves Creative Energy's forecast Sales Expense of $67,000 for 2016 and $70,000 for 2017.**

[130] Creative Energy Reply Submission, pp. 10-11.

Creative Energy has provided no allocation of Sales Expense costs for Other Projects. Given CE's emphasis on expansion and new projects, the Panel finds that it is reasonable to allocate at least a portion of Sales Expense costs to Other Projects. **The Panel directs Creative Energy to allocate $5,000 in both 2016 and 2017 of Sales Expense costs out of Steam to Other Projects**. The Panel expects operational expense requirements for Other Projects will be addressed more fully in the required cost allocation study outlined in Section 2.4.

Director Fees

Given that Creative Energy is in the midst of transition, the Panel accepts there may be an increased need for board meetings and as a result Director Fees will be higher. Moreover, the Panel acknowledges that CE has taken steps to cut back on the number of meetings and manage these costs to a level that is lower than 2015 actual expenditures. **Therefore, the Panel approves Creative Energy's proposal for Director Fee costs of $48,200 in 2016 and $49,400 in 2017.**

While the Panel accepts the need for a greater number of board meetings given this transitional period we are not persuaded the bulk of additional costs should be borne by Steam Service customers. The Panel acknowledges that Creative Energy has proposed a small amount of forecasted Director Fees be allocated to NEFC but notes that none of these costs have been allocated to Other Projects. The need for additional board meetings is in our view driven by CE's development of new business projects and the NEFC, as there is little evidence to suggest that the Steam business has changed significantly. Because of this, the Panel believes it more appropriate to allocate costs in excess of historical amounts to its other business activities. **Accordingly, the Panel directs Creative Energy to allocate $16,000 in both 2016 and 2017 to other business activities and split these evenly between NEFC and Other Projects.** The Panel expects the cost allocation for Directors Fees to be addressed as part of the cost allocation study.

Administration and General Salaries

Overall Administration and General Salary costs are in a range that is similar to actual expenditures in 2012 and 2013. The only contentious issue arising in this category is the proposal to increase the allocation to Steam for the salary and benefits of the VP Customer Relations and Development from the current 25 percent to 35 percent in recognition of the need for greater focus on the core Steam business. CEC has objected to this and considers 25 percent to be sufficient. The Panel does not agree. As noted, increased expenditures for sales initiatives in 2015 indicate CE is spending additional time ensuring they retain and grow their existing Steam customer base. While we were not persuaded a further increase in direct sales is warranted in 2016 and 2017, we do accept there are benefits to placing focus on this part of the business. However, the Panel notes that CE reports that it continues to include 25 percent of the VP's salary and benefits in Steam Rates for the period leading to this individual's departure. **Therefore, the Panel approves the increase in salary and benefits allocation of the VP Customer Relations and Development from 25 to 35 percent as proposed by CE starting in 2017 only. The allocation for 2016 is to remain at 25 percent. Noting there were no other issues raised, the Panel also approves Administration and General Salaries of $584,600 in 2016 and $617,900 in 2017.** These amounts are more reflective of Administration and General Salary expenditures in 2012 and 2013 prior to NEFC.

The Panel also approves the allocation of $1,500 in 2016 and $6,000 to NEFC. However, because there was only minimal rationale provided, the Panel directs Creative Energy to address appropriate costs to be allocated to NEFC and Other Projects as part of the cost allocation study.

<u>Office Supplies and Expenses</u>

There were two areas of contention: expenses for IT consultants and cost allocation of general office expenses to NEFC. CE, in reply to CEC's argument that costs should return to a normalized level once projects are complete, asserts that it expects to continue IT system upgrades with important projects in 2016 and 2017. **The Panel accepts this explanation and approves the proposed expenditures of $27,768 in 2016 and $28,323 in 2017.** However, for the next RRA Creative is requested to provide a more detailed IT plan outlining any further project requirements and explaining why outside consultants are required to complete the work.

CEC submits the incremental office expenses charged to NEFC are too high. The Panel is not satisfied the evidence supports this. NEFC is a new project and because of this may well require the expenditure of additional supply expenditures. Therefore, we have allowed this allocation expense but expect CE to be able to provide a fulsome explanation of their requirements for NEFC in its next RRA and address this as part of the cost allocation study.

All other costs under Office Supplies and Expenses appear reasonable and in line with historical expenses. **Therefore, as no other issues were raised, the Panel approves the proposed costs of $97,500 for 2016 and $105,200 for 2017.**

<u>Special Services</u>

The Panel accepts CE's explanation that due to increased regulatory requirements, costs related to Special Services will increase. However, we agree with CEC that the issue is whether the amounts proposed by CE for 2016 and 2017 are an accurate reflection of what actual expenditures will be. CE has proposed a deferral account to record and manage all Special Services variances that occur and CEC agrees with this approach. The Panel also agrees as it will allow variances to be dealt with in a fair and equitable manner. The management of this deferral account will be discussed further in Sections 4.5.

The Panel also notes there is a need to capture all Special Services costs which are directly attributable to NEFC. These need to be identified, removed from Special Services and charged directly to NEFC. **Accordingly, Creative Energy is directed to identify all NEFC direct costs within Special Services and move them to NEFC as part of its compliance filing. The Panel approves the remaining Steam Special Services costs as proposed by CE.**

<u>Insurance</u>

Given that Creative Energy has been undertaking the construction of NEFC and its expectation that insurance costs will continue to increase as a result, the Panel approves the 2016 Insurance forecast of $114,100 and $123,900.

However the Panel is not persuaded that the 2016 cost allocation to NEFC for insurance expense of $4,100 and $11,900 in 2017 is appropriate. Creative Energy has explained that insurance costs are based on construction activity. The Panel does not agree with this methodology but acknowledge that increased construction activity will effect overall insurance costs. For the period 2011 through 2014 insurance costs ranged from a low of $83,363 to a high of $86,854 in 2014. Since that time the cost of insurance has risen dramatically with most of this being borne by Steam customers. Creative Energy has provided no explanation of why these costs have increased. Given there is no evidence to support a large increase in insurance for the Steam Service and NEFC has been under construction and Creative Energy has six Other Projects underway, the Panel finds that the largest part of these increased costs should be allocated to NEFC and the Other Projects rather than to Steam as has been proposed. **Accordingly, the Panel directs Creative Energy to remove Insurance Costs in the amount of $25,000 for 2016 and $33,000 for 2017 from Steam Service and allocate them evenly between NEFC and Other Projects**. In the Panel's view these amounts are a far more accurate estimate of actual costs and leaves Steam Service with costs that are in line with 2011-2014 Insurance costs.

The Panel approves all other Sales and General Administration accounts for 2016 and 2017 as proposed noting they are reasonable with any significant variances adequately explained.

The magnitude of the increase in costs over historical levels remains a concern for the Panel. Given the nature of these cost increases it becomes increasingly important that they are appropriately allocated among Creative Energy's business operations. This will be further addressed in Section 5.4.

4.5 Special Services Deferral Account

Creative Energy requests approval of a Special Services Deferral Account (SSDA) to capture the annual variance between forecast and actual third party costs relating to regulatory filings and proceedings required under the UCA. In general, this includes BCUC levies, PACA funding and third party costs required for preparation of regulatory filings and proceedings. Creative Energy also proposes that the balance in the SSDA be amortized over one year with a carrying cost equal to its short-term debt rate.[131]

Creative Energy provides details of the costs to be included in the SSDA. Specifically, CE is seeking to capture the annual variances between forecast and actual costs related to third party expenses necessary to meet its regulatory filing requirements. These include the following:

- expenses related to regulatory proceedings, including BCUC levies and PACA funding;
- Annual Gas Contracting Plan;
- Financing Plan (if there are any significant changes in financing structure);
- Fuel Recovery Adjustment Account (when there are changes to the Fuel Recovery Charge Rate);
- Annual Report;
- Rate Design for the Steam Service:
- Long Term Resource Plan;
- Costs of model for RRA Robert Half – modelling/temp help; and
- MS Project Expenditures Design and Implementation of Expenditure Tracking Program.[132]

Creative Energy states that in respect of each regulatory cost item for its proposed SSDA:

a) all costs are driven by regulatory requirements and are outside of management control;
b) all costs are material and could adversely impact Creative Energy's competitive position; and
c) Steam Service is a Stream B utility with significant competitive pressures and a load that has been declining for the past five years.[133]

[131] Exhibit B-1A, pp. 51-52; and Exhibit B-18, BCUC IR 95.1.
[132] Exhibit No. B-11. BCUC IRs 1 33.1-33.1.1, BCUC IR 95.1 and Exhibit B-1A p. 51 and Appendix 8.
[133] Exhibit No. B-18, BCUC IR 95.2.

Creative Energy submits a deferral account for the recovery of third party regulatory costs is the type of account typically approved by the Commission and the merit in having one deferral account, is that it should reduce the number of accounts necessary to record regulatory expenses and simplify the regulatory process for recovery of those costs.[134]

Submissions

BCOAPO does not oppose the SSDA for recovery of regulatory costs as they are typically the subject of deferral accounts approved by the Commission.[135]

CEC agrees with Creative Energy's proposal to establish the SDDA with a one-year amortization period at a short-term debt carrying cost.[136]

BCSEA-SCBC agrees the proposed SSDA would be more efficient than a separate deferral account for each regulatory proceeding.[137]

Commission determination

Creation of the SSDA

The evidence establishes that third party costs properly related to regulatory proceedings are outside of management control. It is very difficult for Creative Energy to accurately forecast the costs it will be required to pay to third parties in respect of the various regulatory proceedings in 2016 and 2017. The evidence further establishes that many of the costs are material and that Creative Energy's management has a significant incentive to control and manage its costs required to meet regulatory filing requirements as a Stream B utility with significant competitive pressures. The proposed SDDA will allow Creative Energy to recover certain regulatory costs that are difficult to forecast and will protect the ratepayers and shareholders from any variance between the forecasted and actual costs. Finally, the interveners have either supported or not opposed the SSDA on the basis of a one-year amortization period at short-term debt carrying costs.

While there were no specific submissions on the point, Creative Energy's proposal to name the deferral account the "Special Services Deferral Account" is not, in the Panel's view properly descriptive of the variance balances intended to be captured in the account. The proposed account is intended to capture the annual variance between forecasted and actual third party costs relating to regulatory filings and proceedings required under the UCA. The name "Special Services" is not descriptive of that intent and is too vague and ambiguous. Naming the proposed deferral account the "Third Party Regulatory Costs Deferral Account" (TPRCDA) would, in the Panel's view, be a more accurate description of the proposed account.

The Panel approves the creation of a TPRCDA specifically limited to capture the annual variance between forecasted and actual third party costs relating to regulatory filings and proceedings required under the UCA, with a one year amortization period at a short term debt carrying cost. The Panel further determines that the TPRCDA will be in effect for a 5 year period from the date of this Decision and concurrent Order, at the end of which period Creative Energy will have to apply to the Commission for renewal of the TPRCDA.

[134] CE Final Submission, p. 15.
[135] BCOAPO Final Submission, p. 4.
[136] CEC Final Submission, p. 25.
[137] BCSEA-BCSC Final Submission, p. 9.

Components of TPRCDA and compliance

BCOAPO submits it is essential that Creative Energy adequately track the details of each of the components of the overall TPRCDA balance in a way that is sufficient to enable, on review, a determination of the prudence of the spending, prior to any recovery from ratepayers. It also submits that the Commission should specify the categories and level of detail that Creative Energy must provide for entries to the proposed account.[138]

The Panel agrees that guidance needs to be provided as to what constitutes third party costs relating to regulatory filings and proceedings required under the UCA and any compliance requirements in respect of same. **Accordingly, the Panel determines that any variance between forecasted and actual third party costs relating to regulatory filings and proceedings required under the UCA are eligible for inclusion in the TPRCDA**.

Specifically, Creative Energy proposes to capture third party regulatory cost items set out in Appendix 8, Account 923 under the headings "Regulatory" and "RRA."[139] **With the exception of the items dealt with in the following paragraphs, the Panel approves the items in Account 923 under the headings "Regulatory" and "RRA" as eligible for inclusion in the TPRCDA.**

MS Project

Account 923 does not include MS Project under the headings "Regulatory" or "RRA."[140] It is included in Account 923 under the heading "Outside Services." However, Creative Energy states that it expects to incur third party regulatory expenses for, among other items, the MS Project.[141] The Panel finds there is uncertainty on the evidentiary record as to whether CE intends to capture the MS Program in the account as there is no description of how it relates to third party regulatory costs and, in any event, the amount is not material. **For those reasons the Panel does not approve the MS Project costs being captured in the TPRCDA.**

Finance and Miscellaneous

Creative Energy also includes "Finance $5000" and "Misc $6072" in Account 923 as third party regulatory costs. **For clarity, the Panel determines that due to the lack of detail as to what these costs are and how they are third party costs relating to regulatory filings and proceedings under the UCA, they are denied and not eligible for inclusion in the TPRCDA.**

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[138] BCOAPO Final Submission, p. 4.
[139] Exhibit B-11, BCUC IR 33.1.1.
[140] Exhibit B-1A, Appendix 8, pp. 4-5.
[141] Exhibit B-11, BCUC IR 95.1.

<u>Compliance requirements</u>

In all future revenue requirements applications (RRA) Creative Energy is directed to provide a comprehensive explanation for each deferred expense item as follows: a detailed description of the expense item; a justification as to why the particular variance is eligible to be included in the TPRCDA; and an explanation of why the expense item was greater or less than forecast.

	THIRD PARTY REGULATORY COSTS DEFERRAL ACCOUNT	A				A		
	Expense Item	2016 Approved	2016 Actual	2016 Variance		2017 Approved	2017 Actual	2017 Variance
1	Ex: BCUC RRA Fees	15,000	19,000	4,000		15,000	12,000	-3,000
2								
3								
4								
TOTAL				4,000				-3,000

A -> must agree to Exhibit B-1A, Appendix 8, p.4

TOTALS -> must agree to Additions/(Deductions) in the 'Non-Rate Base Deferred Expenses' schedule (ex: Appendix B-1A, Appendix 1, schedule 12)

4.6 Taxes

Creative Energy is required to pay municipal, property and income taxes. Its tax requirements are outlined as follows:

<u>Municipal Taxes (COV Access Fee)</u>

Creative Energy states it has a 30-year Municipal Access Agreement (MAA) with the COV. This provides CE a non-exclusive franchise right to construct, operate and maintain its system of distribution for steam-heat supply and hot water services. In exchange the company is required to pay an annual license fee amounting to 1.25 percent of tariff revenues (for the immediate preceding calendar year) plus a fixed fee escalated in line with tariff increases. The escalated flat fee governed by the Agreement with COV is stated as follows:

> *$100,000 adjusted (on a cumulative basis) in each year (commencing with an adjustment to the first such payment on April 15,200 (sic)) in proportion to any and all changes made during the <u>prior</u> calendar year to the Company's prices net of fuel adjustment recoveries for the sale of heat or cold.[emphasis added]*

Table 12 provides a summary of CE's forecast for municipal taxes for 2016 and 2017.

Table 12
Municipal Taxes[142]

1 Municipal Taxes	2011	2012	2013	2014	2015	2015	2016	2017
2	Actual	Actual	Actual	Actual	Approved	Unaudited	Forecast	Forecast
3 Item								
4 Annual Steam Revenues	7,397,807	7,106,093	6,931,468	7,241,719	8,299,898	7,352,630	9,041,100	9,635,500
5 Tax Rate	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%
6 Municipal Tax on Steam Revenue	92,473	88,826	86,643	90,521	103,749	91,908	113,000	120,400
7								
8 Prior Year Flat Fee	116,400	116,400	116,400	129,372	122,567	129,372	142,309	151,200
9 Rate Increase	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	6.23%	6.23%
10 Escalated Flat Fee	116,400	116,400	116,400	129,372	122,567	142,309	151,200	160,600
11								
12 Total Municipal Tax	$ 208,873	$ 205,226	$ 203,043	$ 219,893	$ 226,316	$ 234,217	$ 264,200	$ 281,000

Amounts in this table (the totals have been updated to reflect total Municipal Access fees of $264,900 in 2016 and $285,200 in 2017)[143] have been calculated as per the terms of the MAA, and are based on forecast revenues and CE's proposed rate increases. Included in the variable portion of the fee in Table 12 is the incremental municipal taxes related to NEFC which are calculated at $1,800 for 2016 and $10,300 for 2017 (based on 1.25 percent of NEFC revenues of $136,000 for 2016 and $768,000 for 2017).[144]

Property Taxes

Creative Energy has forecast gross property taxes for its Beatty Street location at $442,700 for 2016 and $464,800 for 2017. These forecasts are prepared based on applying historical trends to the expected future property assessment value and future levy rates. Deducted from these total amounts is the portion of the total property tax allocated to non-regulated operations (NRO). NRO operations include leasing non-utility office space to tenants and renting parking that is unused for utility operation. CE proposes an allocation of $102,000 in 2016 and $107,000 in 2017 for NRO which is approximately 23 percent of the total amount. Amounts allocated to NRO are calculated based on building and land square footage and are consistent with the methodology applied in the past.

Income Taxes

Creative Energy reports that income taxes for 2015 were much lower than approved due to lower income related to the weather being much warmer than normal. Looking ahead, the company has forecast income tax expense of $240,500 for 2016 and $266,000 for 2017 for its Steam Service and NECF Service, an effective income tax rate of 26 percent. To calculate its income tax expense, CE uses a flow-through or current taxes approach. With this method future enacted tax rates and the equity portion rate base return (adjusted for permanent and temporary tax differences) are used to calculate total tax expense.

142 Exhibit B-1A, p. 35.
143 Exhibit B-11, BCUC IR 9.2(ii), Appendix 19.
144 Exhibit B-1A, p. 35.

CE states its method of calculating income tax is a similar format to that used by other utilities and can be effectively applied to both forecast and actuals. CE proposes to apply this format to Steam and NEFC Service in all future revenue requirement and annual report filings.[145]

Submissions

CEC submits there should be no benefit or penalty to either the shareholder or the ratepayer for tax forecast variances. CEC recommends a deferral account be established to capture any such variances.[146]

Other interveners made no further submissions on CE tax proposals.

Creative Energy does not support the Commission establishing a deferral account as proposed by CEC. In its view differences between forecast and actual tax expenses in effect reduces the impact of load forecast variances. Creative points out that where actual loads exceed forecast, it is likely net income will be higher and thus taxes will be higher. If there were a deferral account shareholders could benefit from both the higher returns and still be able to recover the variance in income taxes related to higher customer returns which would be unacceptable to customers.[147]

Commission determination

Creative Energy has proposed its methodologies for the calculation of municipal, property and income taxes. None of the interveners raised concern with the method of calculation employed by the CE. Moreover, the proposed methodologies are in keeping with past practice and where similar circumstances exist, are in line with methodologies employed by other utilities. However, the Panel notes that Creative has incorrectly applied its proposed methodology for determining municipal taxes. Rather than applying the 1.25 percent to the previous years, 2015 and 2016, it has applied the rate to 2016 and 2017. **Given these circumstances, the Panel approves the methodologies for the tax calculations as proposed by Creative Energy and directs CE to revise its municipal tax calculations to be in accordance with this approved methodology.**

The Panel also notes the calculation for Municipal and Income Tax expense are subject to change due to determinations in this Decision effecting net income, load forecast and other factors. **Therefore, the Panel does not approve the actual tax amounts proposed by CE for each of these tax accounts. Creative Energy is directed to update the tax calculations reflecting any changes resulting from determinations made in this Decision and file as part of its compliance filing following this Decision.**

The Panel rejects CEC's recommendation to establish a deferral account to capture tax variances. The Panel has considered the matter and if a load forecast deferral account were approved in the future, it may be appropriate at that time to consider a tax deferral account in combination. However, given that that CE does not currently have a load forecast deferral account the Panel agrees with CE that such a deferral account is not necessary at this time.

[145] Exhibit B-1A, pp. 34-38.
[146] CEC Final Submission, pp. 20-21.
[147] Creative Energy Reply Submission, p. 8.

4.7 Steam Rate Base and Capital Additions

Creative Energy forecasts its consolidated mid-year rate base to be $28.2 million in the 2016, and $31.6 million in the 2017.[148] Without consideration of NEFC Service, Steam Service's mid-year rate base is approximately $26.3 million in 2016 and $26.5 million in 2017.[149]

The Steam Service mid-year rate base is comprised of:

- Net Mid-year Plant in Service;
- Contributions in aid of construction (CIAC);
- Mid-year plant allocated to NRO;
- Mid-year deferral account balances; and
- Mid-year working capital.[150]

Two issues were raised with respect to rate base:

1. The need for a capitalized overhead study;
2. Inclusion of construction work in progress (CWIP) in the rate base.

Following discussion on each of these issues the Panel will address a third item, Steam Service's projected capital requirements.

4.7.1 Capitalized Overhead Study

Creative Energy acknowledges that the Commission in the CE 2015-2017 RRA directed Creative Energy to file a capitalized overhead study in its next RRA. CE asked its auditors for an estimate of the cost of such a study and was told it would cost a minimum of $50,000 and could range up to $250,000 or above. Based on this cost information Creative Energy concluded it would be not be in ratepayers interests to pursue such a study and it would not do so unless specifically ordered to do so by the Commission in this proceeding. Creative Energy has applied the same overhead capitalization approach to the current year as it has used in past years. The capitalized overhead rate applied in the past has been less than half of one percent.[151]

Creative Energy has calculated the 2016 and 2017 overhead capitalization percentage at 0.43 percent amounting to approximately $20,000 in each of the test years. CE acknowledges that it failed to ask for a reconsideration of the Commission's directive. However, it argues the Commission should take a more practical approach and because of its size, relieve it of the requirement to undertake an overhead capitalization study as the benefits of such a study are unlikely to exceed the costs.[152]

Submissions

CEC makes the following points in its submissions:

- Creative Energy has adopted an unreasonable approach to regulation in arguing that it is acceptable to ignore Commission directives it does not agree with;

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[148] Exhibit B-1A, p. 44.
[149] Exhibit B-1A, Appendix 9, Schedule 2.
[150] Exhibit B-1A, p. 44.
[151] Exhibit B-1A, p. 52.
[152] Creative Energy Final Submission, pp. 11-12.

- It would be inappropriate for the Commission to ignore Creative Energy's compliance failure by determining there is 'insufficient evidence regarding overhead capitalization or …conclud(ing) that the benefits are unlikely to exceed the costs of such a study';
- Overhead capitalization of significant capital projects could easily be 4 percent of overheads and approximately $200,000 which could impact rate increases by as much as 3 percent; and

CEC recommends the Commission require Creative Energy to commence an overhead capitalization study as part of a compliance filing.[153]

BCOAPO argues the degree of oversight provided by the Commission should not be determined by the size of the utility as suggested by Creative Energy. However BCOAPO does agree there is some value in weighing the benefits of a process against the potential cost of the project. BCOAPO submits that Creative Energy's case would be more convincing had it provided some evidence that the amount it is capitalizing is 'in the right ball park'.

BCSEA-SCBC agrees with Creative Energy that the undertaking of an overhead capitalization study is not warranted as the cost of the study would be disproportionate to the amount of capitalized overheads booked. BCSEA-SCBC also agrees with Creative Energy that it is procedurally more efficient to address the issue in this proceeding rather than through a reconsideration of the Commission's previous Decision. However, it takes no position as to whether Creative Energy should have done more than it did to have the Commission approve this procedural approach.

Commission determination

Creative Energy's disregard of a Commission directive without asking for a variance or reconsideration of the Decision or requesting the Commission to re-address this directive prior to the filing of this Application in lieu of reconsideration was inappropriate. The Panel in this instance accepts Creative Energy's evidence that as a practical matter it took this approach to protect ratepayers. However, Creative Energy is reminded that if it fails to obey a future directive without receiving approval or direction from the Commission it does so at its own risk.

The Panel agrees with BCOAPO that Creative Energy's case would have been stronger if it could have provided evidence that the current capitalized overhead amounts were reasonable. However, the Panel recognizes that Creative Energy's capitalized overhead amounts are within the $20,000 a year range and understand that a study costing over $50,000 may outweigh the benefits. **Therefore, the Panel relieves Creative Energy of the requirement to have a capitalized overhead study performed at this time.**

In future RRAs Creative Energy is directed to use the same capitalized overhead rates for regulatory reporting as it does for financial reporting. It also must provide a table in future RRAs disclosing a five year history of the following: (a) the capitalized overhead rates and amounts used for financial reporting purposes, (b) the forecast and actual capitalized overhead amounts used in the RRA, and (c) the forecast and actual capitalized labour.

[153] CEC Final Submission, pp. 23-24.

4.7.2 Inclusion of Construction Work in Progress in the Rate Base

Creative Energy includes in working capital estimates of its mid-year CWIP that is not subject to the allowance for funds used during construction (AFUDC). CE states this is the same practice it followed in the 2014 and 2015-2017 RRA's.[154] Creative Energy stated:

> As to the reasons why work in progress is included in working capital and not held outside of plant in service accumulating AFUDC, there is no particular reason except for the fact that CE thought this is the best way to present it. If it is typically held outside of plant in service accumulating AFUDC, CE is open to changing this accordingly.[155]

Later, Creative Energy stated it has reconsidered its response to this information request and the treatment of CWIP should remain, as included in the Application until the next RRA at which time Creative Energy could be directed to change its current practice.[156]

The CWIP included in rate base is $1.099 million in the 2016 test period and $1.136 million in 2017. Taking CWIP out of rate base (and inflating it by AFUDC) is estimated to lower the Steam Service rate increase by approximately 0.75 percent.[157]

Submissions

BCOAPO strongly opposes putting off the change to exclude CWIP from rate base for two years. BCOAPO submits that the exclusion of CWIP from rate base, allowing it to collect AFUDC, and putting it into rate base when the project becomes used and useful is the proper accounting treatment and there does not appear to be any reason to delay for another two years. In BCOAPO's view it appears ratepayers have been overpaying for services in previous years.[158]

In reply, Creative Energy states that it disagrees with the statement that ratepayers have been overpaying for services. It submits that the two approaches – AFUDC versus working capital, result in timing differences of recovery, not overpayment. For this reason Creative Energy believes it is appropriate to continue the current practice until the next RRA.[159]

Commission determination

The Panel agrees with Creative Energy that including CWIP in working capital or excluding it and later adding it to rate base, including AFUDC, is a timing issue, not an overpayment issue. The Panel notes however that the practice of not including CWIP until projects are used and useful is the standard regulatory approach that also best attributes the costs of a project to the parties benefiting from the use of the project. The Panel finds that

[154] Creative Energy, Final Submission, p. 13.
[155] Exhibit B-11, BCUC IR 36.6.
[156] Creative Energy, Final Submission, p. 14.
[157] Ibid.
[158] BCOAPO Final Submission, p. 4.
[159] Creative Energy Reply Submission, p. 12.

allowing CWIP to attract AFUDC and be added to rate base when the project is used and useful is the appropriate methodology. **Therefore, starting in 2016 the Panel directs Creative Energy to exclude CWIP from working capital and account for it outside of rate base, attracting AFUDC and add it to rate base only when projects become used and useful.**

4.7.3 Projected Steam Service Capital Additions

Creative Energy seeks approval of forecast capital expenditures under section 44.2(3) of the UCA. Creative Energy forecasts that it will have Steam Service capital expenditures of $2,005,500 for 2016 and $1,270,000 for 2017.[160]

No interveners objected to the capital expenditure.

Commission determination

Having assessed the evidence put forward with respect to the capital additions, the Panel, pursuant to section 44.2(3), accepts the Steam Service capital expenditure schedule for 2016 and 2017 put forward by Creative Energy and finds that the expenditures are in the public interest.

The Panel approves the mid-year Steam Service rate base forecast of $26.3 million in 2016 and $25.5 million for 2017 as proposed by Creative Energy.

4.8 Amortization of Deferred Expenses

As set out in the consolidated regulatory schedules 11 and 12 in Appendix 1 to Exhibit B-1A, Creative Energy is requesting to recover in rates the amortization of a rate base deferred expense of $166,500 in both 2016 and 2017 with no allocation to NEFC. It is also requesting the amortization of non-rate base deferred expenses of $119,092 in 2016 and $136,328 in 2017 with $8,600 being allocated to NEFC in 2016 and 2017.[161]

4.8.1 Rate Base Deferred Expenses

Creative Energy's Steam Service has two rate base deferral accounts approved as part of the CE 2015-2017 RRA pursuant to Order G-98-15; the After Tax Pension Asset and the Generic Cost of Capital (GCOC) deferral accounts. The forecast amortization of $166,500 in each of the test periods reflects the amortization of the GCOC account only as no amortization is allowed on the After Tax Pension Asset.[162]

The After Tax Pension Asset represents the cumulative difference between the annual after-tax cash contributions to the pension plan and the regulatory pension expense. As directed by Order G-98-15, the After Tax Pension Asset is $414,012 based on 2015 data.[163] Creative Energy explains that the balance was not updated for 2016 because the company's financial statements were not finalized at the time the Application was filed.

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[160] Exhibit B-1A, Appendix 11A.
[161] Exhibit B-1A, Table 3, p. 21.
[162] Exhibit B-1A, p. 50; CE 2015-2017 RRA Decision, p. 53.
[163] Exhibit B-18, BCUC IR 79.1 and 79.2.

Commission determination

The Panel finds that the forecast amortization expense for the GCOC Deferral Account is consistent with the directives in Order G-98-15, and therefore approves Creative Energy's forecast of $166,500 in each of 2016 and 2017. The Panel accepts that none of the amortization is allocated to NEFC as the balance in the GCOC account was established prior to NEFC's existence. **Once the balance in the GCOC account is fully amortized at the end of 2017, Creative Energy is directed to close the account.**

Creative Energy is only entitled to earn a rate base return on the balance of the After Tax Pension Asset and therefore, there is no amortization.[164] CE has not allocated any of the After Tax Pension Asset balance to NEFC's rate base. For the test period the Panel considers this appropriate as the balance is based on 2015 data, prior to the existence of NEFC. However, the After Tax Pension Asset should be updated for more current information in the next RRA. **Therefore, the Panel directs Creative Energy to address, as part of its cost allocation study, what portion of that After Tax Pension Asset should be allocated to Steam Service and NEFC's rate base and what portion, if any, to the Other Projects.**

4.8.2 Non-Rate Base Deferred Expenses

Creative Energy's Steam Service has two non-rate base deferral accounts approved pursuant to Order G-98-15; the [Pension] Regulatory Transition Adjustment Deferral Account, and the Pension Expense Deferral Account. NEFC has one non-rate base deferral account approved as part of the NEFC CPCN, the RDDA. The regulatory schedules also include an entry for the 2016 Steam revenue deficiency to account for the impacts of rate smoothing.

Regulatory Transition Adjustment Deferral Account

The Regulatory Transition Adjustment Account is approved to recover over three years a onetime regulatory pension adjustment of $301,177 starting in 2019. Amortization of $110,500 in each of the test periods relates to the amortization of this account.

Pension Expense Deferral Account

The Pension Expense Account was approved to capture the variance between the forecast pension expense recovered in rates and the actual pension expense reported in the company's audited financial statements.

Creative Energy explains that the balance in the Pension Expense Account is forecast to remain at $0 during the test period as the actual 2015 pension expense was not known at the time the Application was filed. CE subsequently reported it now knows the variance between the 2015 approved pension expense of $229,387 and the actual expense of $315,817 is $86,484.[165]

Creative Energy also states that in the future any variance between the forecast and actual pension expense will be recovered through Steam Service rates and none will flow through to NEFC or its Other Projects.

[164] CE 2015-2017 RRA Decision, p. 53.
[165] Exhibit B-18, BCUC IR 80.1.

Revenue Deficiency Deferral Account (RDDA)

Creative Energy is requesting to recover the interest on the RDDA account of $8,600 in 2016 and 2017 from NEFC as part of the 'amortization of the non-rate based deferred expense'. It initially explained that if the annual interest in the RDDA is not added to the NEFC revenue requirements each year, the balance in the RDDA will increase at a much higher rate, thereby increasing the time required to get the RDDA to zero.[166] However, Creative Energy later confirms that in years such as 2016 and 2017 where there are forecast additions to the RDDA, amortizing the interest will simply increase the amount added to the RDDA by an equal amount and will not change the timeframe to get the account to zero.[167]

Creative Energy did not directly address the calculation of the interest on the RDDA other than referring to the NEFC regulatory schedules provided in Exhibit B-1A, Appendix 9, which shows a forecast of $6,500; however the consolidated revenue requirements shows an amortization of $8,600.[168] Creative Energy later confirmed that the correct amortization of the RDDA is $6,500 as set out in the NEFC schedules and not $8,600, the amount used in the Steam Service revenue requirements.[169]

2016 Steam Revenue Deficiency

In order to smooth out the forecast rate increase, CE originally requested approval to carry over $391,000 of the 2016 Steam revenue deficiency (2016 Steam Revenue Deficiency) for recovery in 2017 rates.[170] The 2016 Steam Revenue Deficiency was later updated to $458,434 when Creative Energy proposed to change the NEFC steam allocation methodology. Creative Energy explains that it included $17,236 in the forecast 'amortization of non-rate base deferred expense' to recover the interest on the 2016 Steam Revenue Deficiency using a 3.83 percent WACD.[171]

Creative Energy states it does not have Commission approval, nor is it requesting approval, for a deferral account to capture the 2016 Steam Revenue Deficiency. CE explains that it did not propose a deferral account for the deficiency because it included the carrying cost in the 2017 revenue requirements. In circumstances where rate smoothing is proposed to occur in one of the test periods that are the subject of the RRA, it does not believe that an account is necessary. Creative Energy does not oppose the approval of such a deferral account, but believes that it will add an unnecessary regulatory burden.[172]

Commission determination

Regulatory Transition Adjustment Deferral Account

The Panel approves the forecast amortization of the Regulatory Transition Adjustment Account of $110,500 in each of 2016 and 2017 as it is consistent with Order G-98-15. Once the balance in the Regulatory Transition Adjustment Account is fully amortized at the end of 2018, Creative Energy is directed to close the account.

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[166] Exhibit B-11, BCUC IR 56.8.
[167] Exhibit B-18, BCUC IR 110.3.
[168] Exhibit B1-A: p. 64 and Appendix 9, Schedule 12.
[169] Exhibit B-18, BCUC IR 110.3.
[170] Exhibit B-1A, Table 3, p. 21.
[171] Exhibit B-18, BCUC IR 69.1.
[172] Exhibit B-18, BCUC IRs 69.3 and 79.1.

Pension Expense Deferral Account

The Panel directs CE to add the 2015 $86,484 pension expense variance to the Pension Expense Deferral Account and amortize it in 2016 consistent with the terms set out in the Decision attached to Order G-98-15. The Panel is concerned that if the variance is not recovered in the test period it will be much larger in the next revenue requirements application, given that it will include the 2016 and 2017 pension expense variances as well.

The Panel also directs the cost allocation study to address how the amortization of the pension expense variance is to be allocated between Steam, NEFC, and Creative Energy's Other Projects in the future. Given there is direct labour capitalized to NEFC and the Other Projects, it would appear that not all the variance relates to Steam Service labour.

RDDA

The Panel does not approve the amortization of the RDDA of $8,600 in 2016 or 2017 as it is an unnecessary adjustment that does not change NEFC's revenue requirement or the balance in the RDDA. The RDDA is further addressed in Section 5.6.

2016 Steam Revenue Deficiency

The Panel denies recovery of the forecast 2017 $17,236 interest expense relating to the 2016 Steam Revenue Deficiency. Given the number of adjustments directed by the Panel in this Decision, the actual amount of the 2016 Steam Revenue Deficiency is unknown at this time and it is not possible to forecast carrying costs on the balance.

The Panel will allow Creative Energy to calculate carrying costs on the actual 2016 Steam Revenue Deficiency but given the short-term nature of the balance, the Panel finds a short-term interest rate on the mid-year balance is more appropriate than the WACD. The carrying costs should be added to the balance of the deficiency and should not flow through as amortization in calculating the 2017 Steam revenue requirement. It is expected the 2016 Steam Revenue Deficiency will be recovered in 2017.

4.9 Steam Service rates

Creative Energy requests final approval of an increase to Steam Rates of 6.23 percent effective May 1, 2016 and interim approval for an increase in 2017 Steam Service rate originally at 6.23 percent, but later updated to 7.15 percent, pending final approval of the 2017 load forecast.[173]

4.9.1 2016 Final Rates and Rate Smoothing

Creative Energy states its revenue deficiency is forecast to be greater in 2016 than in 2017, and therefore it requests to smooth the 2016 Steam Service rate increase by recovering a portion of the deficiency in test period 2017.[174] It explains that without rate smoothing there would be a Steam Service rate increase of 9.30 percent in 2016 and a decrease of 0.79 percent in 2017.[175]

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[173] Exhibit B-1A; p. 15 and Exhibit B-11, BCUC IR 9.2(ii), Appendix 19.
[174] Exhibit B-1A; p. 8; and Exhibit B-11, BCUC IR 9.2(ii), Appendix 19.
[175] Exhibit B-18, BCUC IR 66.7.

Commission determination

The Panel approves the 2016 Steam Service revenue requirement as presented in Appendix 19 subject to the adjustments outlined in this Decision. The Panel approves a permanent increase to Steam Service rates of 6.23 percent effective May 1, 2015, subject to the adjustments outlined in this Decision, and based on Creative Energy's rate smoothing methodology to recover or refund a portion of the 2016 Revenue Deficiency in 2017. For clarity, any differences that arise as a result of the adjustments to the 2016 Steam Service revenue requirements must be reflected in the 2016 Revenue Deficiency and applied to the 2017 Steam Service revenue requirements and resulting rates.

4.9.2 2017 Interim Rates

Originally, Creative Energy proposed that on or before November 1, 2016, it would file a simplified application to update the 2017 demand forecast and the revenue deficiency for projected 2016 year-end balances, including amortization for deferral accounts.[176] Creative Energy later updated its request stating that it no longer expected to make any subsequent updates to the 2017 revenue deficiency and that it would only be filing an updated 2017 load forecast.

Creative Energy explains that for 2017 it is only seeking approval for the revenue requirement and not the load forecast and requests the final 2017 Steam Service rate be based on the updated and approved 2017 load forecast.[177]

Commission determination

The Panel approves Creative Energy's 2017 Steam Service revenue requirement as presented in Appendix 19 subject to the adjustments outlined in this Decision.

The Panel previously approved Creative Energy's request to file the updated 2017 load forecast and therefore approves its request to set 2017 Steam Service rates on an interim and refundable basis effective January 1, 2017.

However, until Creative Energy files the updated 2017 load forecast and recalculates the 2016 and 2017 Steam revenue requirement and the resulting 2016 Revenue Deficiency there is significant uncertainty regarding what the resulting 2017 Steam Service rate increase/decrease will be. **For these reasons the Panel determines there is insufficient evidence to approve an interim Steam Service rate increase of 7.15 percent in 2017 and directs the 2017 interim Steam Service rate to be set without a rate increase**. Creative Energy should note that because the Panel has set the 2017 Steam Service rate as interim, any final 2017 Steam Service rate approved by the Commission will be effective as of January 1, 2017.

4.9.3 Compliance Filing

Creative Energy is directed to file the updated 2017 load forecast and to recalculate the 2016 and 2017 revenue requirements reflecting the adjustments outlined in this Decision and the resulting final 2017 Steam Service rates in a compliance filing to be made no later than December 30, 2016.

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[176] Exhibit B-1A, p. 15.
[177] Exhibit B-11, BCUC IR 3.1.

The compliance filing must include:

1. Calculation of the disallowed revenue deficiency for the period January 1, 2016 to March 31, 2016;
2. Updated revenue requirement calculation in the same format as Appendix 19 reflecting the Panel directed adjustments in this Decision and the updated 2017 load forecast. The Municipal and Income Tax calculations should reflect the updated revenues;
3. Updated 2016 Steam Revenue Deficiency calculation;
   - Updated supporting regulatory schedules in the same format as those found in Exhibit B-1A, Appendix 1 for Steam Service only, including an explanation for each adjustment and a reference to the section of the Decision directing the adjustment. For clarity the schedules should not be consolidated with NEFC and any errors noted in the Decision should also be addressed;
   - An updated Operating and Maintenance Expense schedule in the same format as Appendix 8A attached to BCUC IR 1.18.3;
   - Calculation for the permanent 2017 FCAC including the FCSA amortization component;
   - Updated rate increase summary in the same format as Appendix 10;
   - Schedule showing the Special Service cost related to Steam Service and list of the costs transferred to NEFC;
   - Baselines for the TPRCDA related to Steam Service for 2016 and 2017;
   - Baseline for the 2016 and 2017 Pension Expense Deferral Account; and
   - Updated Steam Service Tariff Sheets - black lined and clean. The 2017 Tariff Sheets must include the FCAC rate.

5.0 NORTHEAST FALSE CREEK CLASS OF SERVICE - REVENUE REQUIREMENTS, RATES AND RATE DESIGN

5.1 Introduction

Creative Energy is requesting approval for initial rates and an initial rate design for NEFC as set out in Table 12. CE states that the underlying revenue requirement for NEFC reflects the general principles approved by the Commission in the NEFC CPCN Decision and includes steam costs from the Steam Service based on an allocation methodology to treat NEFC as a Steam customer.[178] The remainder of the NEFC revenue requirement is made up of direct costs for the NEFC hot water converter stations, local hot water network, new building energy transfer stations and direct operations and maintenance costs for the NEFC distribution system.[179]

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[178] Exhibit B-1-9, Errata letter, June 7, 2016.
[179] Exhibit B-1A, p. 9.

Table 12
NEFC 2016 and 2017 Revenue Requirement[180]

Line #	Item	2016 Forecast	2017 Forecast
1	CoV Water Charges		
2	Natural Gas Purchases (Commodity)	53,000	314,000
3	Natural Gas Recoveries	0	0
4	Natural Gas Delivery		
5	Oil		
6	Cost of Sales	53,000	314,000
7			
8	Operation & Maintenance Expense	89,000	176,000
9	Municipal Taxes	1,800	10,300
10	Other		
11	Total Operating and Maintenance Expense	143,800	500,300
12	Property Taxes	0	0
13	Income Tax Expense	0	27,300
14	Depreciation Expense	0	177,800
15	Depreciation Expense Allocated to Non Reg	0	0
16	Amortization of CIAC	0	0
17	Amortization of Rate Base Deferred Expenses	0	0
18	Amortization of Non - Rate Base Deferred Expenses	6,500	6,500
19	Actual/Proposed Return on Rate Base	123,100	317,900
20	Cost of Services	273,400	1,029,800
	Cost Alloc from Steam System - Steam Tariff	43,000	222,700
	NEFC Credit for Fuel Recovery in Steam Tariff	(4,000)	(19,000)
21			
22	Total Revenue Requirement	312,400	1,233,500
23			
24	Fuel Cost Stabilization Account Interest Costs		
25	Fuel Cost Recovery		
26	Other Income	0	0
27	Steam Sales Revenues	143,600	824,400
28	Total Revenues	143,600	824,400
29			
30	Revenue (Surplus)/Deficiency	168,800	409,100
31			

The proposed NEFC Service rates have fixed and variable charges, approved in principle as part of the NEFC CPCN Decision. Creative Energy states that "forecast revenues from fixed charges and variable charges approximate the forecast share of fixed and variable costs in the underlying revenue requirements." [181]

As part of the NEFC CPCN Decision, Creative Energy was granted approval for a RDDA to address the different timing for the installation of infrastructure and addition of load.[182]

[180] Exhibit B-1A, Appendix 9, Schedule 1.
[181] Exhibit B-1A, p. 9.
[182] Ibid.

5.2 NEFC Hot Water Sales Forecast

Creative Energy adopted the NEFC hot water load forecast that was filed with and accepted by the Commission in the NEFC CPCN proceeding.[183] Table 13 summarizes NEFC's anticipated sales demand through 2027.

Table 13
NEFC Customer Demand[184]

	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
Connected Floor Area m2	18,130	99,680	224,335	290,700	332,280	409,500	427,980	462,300	477,700	506,300	506,300	506,300
Percent of Buildout	4%	20%	44%	57%	66%	81%	85%	91%	94%	100%	100%	

The NEFC load forecast was developed based on energy use intensity and the expected NEFC floor areas at the end of each year and included adjustments reflecting new connections expected to occur partway through the year.[185] CE made minor updates to the figures for NEFC for 2016 to 1,718 MWh and for 2017 to 9,141 MWh to reflect changes in the timing of some customer connections. CE states that two buildings are now expected to connect to the NEFC system in 2017, rather than three, due to a delay in the start of construction for the Plaza of Nations site.[186] CE forecasts hot water sales of 1,718 MWh and 9,141 MWh for NEFC customers in 2016 and 2017 respectively.[187]

Table 14
Updated NEFC Customer Demand

NEFC Customers	2016 Forecast	2017 Forecast
Demand (MWh)	1,718	9,141
Demand (M#)	5,440	28,942

Commission determination

The Panel accepts the NEFC load forecast of 1,718 MWh in 2016 and 9,141 MWh in 2017 put forward by Creative Energy as the base is consistent with the forecast put forward in the NEFC CPCN and the adjustments subsequently made are minor, and appear reasonable. Further, as discussed in Section 5.6.2, any variance in the forecast NEFC load and the actual load will be captured in a deferral account.

5.3 NEFC Steam Cost Allocation Methodology

As NEFC will be treated as a Steam Service customer for steam cost allocation, Creative Energy proposes to charge NEFC for steam purchases on the basis of the sum of the following three parts:

1. Steam Service rates as charged to core Steam customers; plus
2. Fuel Costs designed exclusively for NEFC; minus

[183] Exhibit B-1A, p. 19.
[184] Ibid.
[185] Ibid.
[186] Exhibit B-11, BCUC IR 44.1.
[187] Exhibit B-18, BCUC IR 70.1.1.

3. Credit for the Base Cost ($0.41).[188]

The only difference between charges to Steam Service customers and NEFC are those related to fuel costs (parts 2 and 3).[189]

5.3.1 Steam Service rate

Creative Energy proposes NEFC be charged for steam consumed at the converter stations using the same four-block declining rate applied to all other Steam Service customers, with the two converter's consumption being pooled each month for the purposes of applying the Steam Service rate. NEFC will have a meter similar to any other Steam customer to determine the metered consumption.[190] Creative Energy proposes the following formula to calculate the Steam Service rate component:[191]

$$\text{Steam Rates paid by NEFC, \$} = \text{[NEFC Metered Consumption, M\#]} \times \text{[Steam Rates, \$/M\#]}$$

Interveners made no submissions on the Steam Service rate being proposed for NEFC.

Commission determination

Given that NEFC is being treated as a Steam Service customer for the purposes of determining the cost it will pay for steam, the Panel approves the Steam Service rate component as it is consistent with how other Steam Service customers are charged and NEFC will have a meter to determine usage similar to other customers.

5.3.2 Fuel Costs

Creative Energy proposes the following two-part formula to calculate the Fuel Cost to be paid by NEFC:[192]

$$\text{Fuel cost paid by NEFC, \$} = \frac{\text{[NEFC Metered Consumption, M\#]}}{\text{[Total Metered Consumption, M\#]}} \times \text{[Total Fuel Cost, \$]}$$

$$\text{Credit to NEFC for fuel recovery in steam rates, \$} = \frac{\text{[Monthly Gas Usage, GJ]} \times \text{[NEFC Metered Consumption / Total Metered Consumption]} \times \text{[\$0.41/mmBtu]}}{\text{[1.0559 GJ/mmBtu]}}$$

Creative Energy states that the credit is necessary because Steam Service rates include the Base Cost of $0.41 per MMBTU of fuel and this amount needs to be subtracted from the charges to avoid double counting.[193]

Creative Energy also proposes that these forecast changes be adjusted annually to reflect: actual total fuel costs, steam consumption by NEFC, and total steam consumption. CE states that the RDDA will capture actual NEFC fuel consumption charges.[194]

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[188] Exhibit B-11, BCUC IR 49.3.
[189] Exhibit B-18, BCUC IR 100.1.
[190] Exhibit B-18, BCUC IR 101.2.
[191] Exhibit B-11, BCUC IR 49.3.
[192] Ibid.
[193] Ibid.
[194] Exhibit B-11, BCUC IR 49.3.

Creative Energy confirms that other new Steam Service customers would participate in the FCAC and the FCSA.[195] If NEFC were to pay for fuel through the FCAC like other Steam Service customers, it would have a minimal impact on NEFC fuel charges as Creative Energy is proposing that NEFC pay for its fuel costs based on consumption like all Steam Service customers.[196] Moreover, if NEFC was charged for fuel through the FCAC like any other customer, the credit adjustment for the fuel Base Cost would not be necessary.[197]

However, Creative Energy believes NEFC should be treated differently from other Steam Service customers with regard to determining the fuel costs charge because it is not a retail customer but rather, a large expansion of CE's system.[198] 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 FCSA.[199]

Submissions

While CEC accepts the premise that the Steam Service rates can reasonably apply to NEFC, it does not agree that NEFC should not participate in the FCAC and the FCSA like other new Steam Service customers. In CEC's view, participation in the FCAC and the FCSA would have a minimal impact on the total NEFC charges and all costs making up the FCAC are also charged to NEFC. Noting the minimal impacts, CEC submits all customers should be treated the same and participate in the FCAC and the FCSA."[200]

Creative Energy provided no further submission on this matter.

Commission determination

The Panel is not persuaded that Creative Energy has made a compelling case to treat NEFC differently than other Steam Service customers. **Therefore, the Panel rejects CE's proposal and directs it to charge NEFC for fuel through the Commission approved FCAC and any variance between actual and forecast fuel to provide NEFC with steam will be captured in the FCSA.**

The Panel notes that NEFC's load is forecast to make up 0.5 percent of total Steam Service load in 2016, an amount that is similar to an average Steam customer and 2.6 percent in 2017 which would be near that of a Steam Service top customer.[201] This indicates that NEFC's load falls within the range of other Steam Service customers and provides little support for Creative Energy's proposal that NEFC be treated differently. The fact that it is not a retail customer also fails to distinguish it from other Steam Service customers as there is no evidence to suggest that a different end use should dictate a different approach to pricing.

The Panel notes that Creative Energy's proposal to calculate the NEFC portion of the fuel cost is laid out in response to BCUC IR 49.3. The Panel finds this methodology unnecessarily complicated and will create additional challenges for CE to track and report balances, potentially frustrating future revenue requirements, application

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[195] Exhibit B-15, CEC IR 9.8; Exhibit B-18, BCUC IR 100.1.1.
[196] Exhibit B-15, CEC IR 9.9.
[197] Exhibit B-18, BCUC IR 104.3.
[198] Exhibit B-11, BCUC IR 49.5.
[199] Exhibit B-18, BCUC IR 102.7.
[200] CEC Final Submission, pp. 32-33, paras. 176-179.
[201] Exhibit B-18, BCUC IR 102.5.

reviews, and creating inefficiencies. Moreover, Creative Energy has asserted that the actual charge to NEFC under its proposed approach is not materially different than if charged under the FCAC, and will eliminate the need for the additional credit adjustment to account for the fuel Base Cost, further simplifying the process.

For the aforementioned reasons the Panel does not agree to charge NEFC for steam in a manner that differs from that of other steam customers.

5.4 NEFC Direct Costs

5.4.1 Steam Costs and Fuel Costs

NEFC's steam costs are forecast on the basis of the three-part formula as follows; Steam Costs are forecast at $43,000 for 2016 and $222,700 in 2017 (part 1); natural gas purchases are forecast at $53,000 and $314,000 in 2016 and 2017 respectively (part 2), and; a credit for the Base Cost at ($4,000) and ($19,000) in 2016 and 2017 respectively (part 3).

Commission determination

NEFC Steam Costs for 2016 and 2017 are calculated in accordance with the Commission approved methodology and are consistent with the NEFC demand forecast used to calculate Steam Service rates. **Therefore, the Panel approves NEFC's Steam Cost Expenses of $43,000 in 2016 and $222,700 in 2017.**

The Panel does not approve the Natural Gas Purchases of $53,000 and $314,000 or the Base Cost credit of ($4,000) and ($19,000) in 2016 and 2017, as the methodology used to calculate these amounts was rejected. The Panel directs NEFC to recalculate the forecast fuel costs based on applying the Steam Service FCAC.

As explained in Section 5.6.2, any differences between NEFC's forecast and actual Steam purchases, including the FCAC, will be recorded in a deferral account.

5.4.2 Other direct costs

Several of NEFC's direct costs included in the revenue requirements have been addressed in this Decision as part of the review of the Steam Service revenue requirement. Specifically, Sales Promotion Expenses and SG&A Expenses included as part of O&M Expense, Municipal Tax Expense, Income Tax Expense, and the Amortization of Non-Rate Base Deferred Expenses. The remaining components to be addressed are Steam Production and Distribution Expense included in O&M, Depreciation Expense, and the Earned Return and Depreciation on rate base.

5.4.3 Steam Production and Distribution Expense included in O&M

Creative Energy has allocated from the Steam Service to NEFC Service, Steam Production Expenses of $25,400 and $62,300 in 2016 and 2017 respectively, and Distribution Expenses related to NEFC-specific assets of $21,900 and $35,600 in 2016 and 2017 respectively.[202]

[202] Exhibit B-1A, p. 60 and Appendix 8.

Creative Energy notes that the allocation of the Steam Production Expense was an oversight and should have been omitted from the NEFC revenue requirement when Creative Energy changed its methodology to treat NEFC as a Steam Service customer.[203]

Commission determination

The Panel accepts that Creative Energy allocated Steam Costs to NEFC in error and directs CE to remove them. The Panel approves the proposed allocation of Distribution Expense from Steam to NEFC in 2016 and 2017, as they appear reasonable and were not contested by the interveners.

5.4.4 Depreciation Expense

Creative Energy projects a Depreciation Expense on Plant in Service of $0 in 2016 and $177,800 in 2017. CE explains it uses a "pooled" or asset class description approach, as opposed to depreciating individual assets consistent with Steam Service. Under this approach, all capital additions are categorized and assigned to a specific asset class with its own specific depreciation rate. The depreciation rate is then applied to the asset class balance in arriving at the total annual depreciation expense for such class.[204] Creative Energy uses a "straight-line" depreciation method for NEFC based on the estimated useful life for a typical asset for each asset class. Capital additions are tracked separately for each asset class and depreciation commences in the year following their addition to minimize the difference between actual and forecast depreciation.[205]

Commission determination

The Panel approves NEFC's proposed methodology used to determine Depreciation Expense as it appears reasonable and is consistent with Steam Service. The Panel also approves the forecast 2016 and 2017 Depreciation Expense as it is calculated accurately and in accordance with the approved methodology.

5.5 NEFC Capital Additions and Rate Base

NEFC mid-year rate base is projected to be $1,965,307 in 2016 and $5,060,274 in 2017. This rate base reflects capital additions of $3,916,849 in 2016 and $2,456,851 in 2017. [206]

The capital additions for 2016, as approved in the NEFC CPCN, were $3,326,000. Creative Energy explains the difference between the current estimate and the CPCN application estimate as being due to higher than expected PACA funding, and increased Creative Energy costs resulting from having to respond to the information requests from interveners.[207]

No interveners raised objections to the projected capital additions.

Commission determination

The Panel finds that the 2016 capital addition projection is consistent with the NEFC CPCN Decision after taking into account the higher than expected regulatory costs.

[203] Exhibit B-18, BCUC IR 88.1.
[204] Exhibit B-1A, p. 40.
[205] Ibid.
[206] Exhibit B-1A, Appendix 9, Schedule 3.
[207] Exhibit B-11, BCUC IR 57.4.1.

5.6 Revenue Deficiency Deferral Account (RDDA)

In the NEFC CPCN Decision the Commission recognized that under the proposed rate model the NEFC Service rates would not initially allow for the collection of sufficient revenue to recover the forecast revenue requirement and therefore approved the RDDA.[208] The purpose of the RDDA is to smooth out rates by setting them in the initial years to recover less than the actual revenue requirement while the new utility is developing its load and to record the resulting forecast revenue shortfall in the RDDA. As the load develops, the balance in the RDDA begins to be recovered through rates and is eventually drawn down to zero.

In the NEFC CPCN, Creative Energy forecast the RDDA to peak at $1.1 million in 2020 and proposed to commence recovery of the balance starting in 2020 with full amortization occurring by 2030. CE refers to this as a 15 year amortization period in reference to the date the account was created and proposed to use the RDDA to accumulate forecast revenue shortfalls and to capture the variance between forecast and actual non-controllable costs.

In the NEFC CPCN Decision the RDDA was approved by the Commission to attract carrying costs at the WACC. The Commission did not approve an amortization period for the account or make a determination with respect to non-controllable variances.[209]

In this Application Creative Energy proposes to:

- Recover the balances in the RDDA over a 15 year period as proposed in the NEFC CPCN; and[210]
- Include revenue shortfalls based on actual revenues received, forecasted controllable costs, and actual amounts for all other costs (non-controllable costs) in the RDDA.[211]

5.6.1 NEFC Service rate Smoothing Variances

Creative Energy forecasts an addition to the RDDA of $171,200 in 2016 and $411,100 in 2017, which represents the difference between the forecast revenue requirement and the forecast revenues in each of those years.[212]

During the evidentiary phase Creative Energy stated that it was not applying the WACC to the balance in the RDDA as approved in the NEFC CPCN but was instead applying the WACD.[213]

Through the IR process CEC explored the idea of a 30 year amortization period that better matched the term of the Neighbourhood Energy Agreement.[214] In response, Creative Energy stated that a 30 year amortization period would result in lower rates in 2018 through 2030, but higher rates between 2016 and 2017 (all else equal). Further, a longer amortization period requiring Creative Energy to finance a higher peak RDDA balance over a longer period of time is not consistent with the TES Guidelines for the least deferral possible.[215]

[208] NEFC CPCN Decision, p. 60.
[209] NEFC CPCN Decision, Section 4.5.1, pp. 59-60.
[210] Exhibit B-1A, p. 64.
[211] Exhibit B-11, BCUC IR 56.1.
[212] Exhibit B-11, attachment to BCUC IR 1.49.3.
[213] Exhibit B-11, BCUC IR 56.8.
[214] Exhibit B-8, CEC IR 1.5.2-3; Exhibit B-15, CEC IR 2.4.1.
[215] Exhibit B-8, CEC IRs 5.1, 5.2 and 5.3.

Submissions

CEC was persuaded by Creative Energy's responses to its concerns, and supports the RDDA approach and the 15-year amortization period.[216]

Commission determination

The Commission previously approved the RDDA to capture, on an annual basis, the variance between the Commission's approved revenue requirements and the forecast revenues calculated on the basis of the approved rates and load forecast.

The Panel is of the view that any other variances the Commission approves should be captured in a separate deferral account outside of the RDDA, because the characteristics of a rate smoothing account such as the RDDA are not the same as those of a variance deferral account, including such things as the appropriate carrying costs and the term of approval for the account. The Panel finds that having a separate deferral account for variances will also result in better transparency and reporting. **Therefore, the Panel does not approve Creative Energy's request to allow the RDDA to capture revenue shortfalls based on actual revenues received, forecasted controllable costs, or the actual amounts for all other costs (non-controllable costs**); however, we will address these in Section 5.6.2 as part of a separate variance deferral account.

The Panel approves the 2016 and 2017 additions to the RDDA as set out in the calculation attached to Exhibit B-11, BCUC IR 49.3, subject to the adjustments outlined in this Decision. The Panel also approves a recovery period, as proposed by Creative Energy, commencing in 2020 and ending in 2030 as being reasonable given the relatively small peak balance expected and revenue streams put forward.

The Panel also directs that the WACC be applied to the balance in the RDDA as the Commission approved that rate as part of the NEFC CPCN, and Creative Energy has not requested otherwise.

5.6.2 Variance Deferral Account

Creative Energy requests to capture the NEFC revenue shortfalls based on actual revenues received, forecasted controllable costs, and actual amounts for all other costs (non-controllable costs).[217] Specifically Creative Energy request to recover the variance for the following:

- Steam Service rates and fuel costs paid for Steam Service;
- Revenues related to load variances;
- Insurance expenses;
- Power pumping and lease space included in GL 502;
- Operator costs included in GL 870;
- MAA fees; and
- Rate based dependant expenses including depreciation, ROE, and interest expense.[218]

[216] CEC Final Submission, p. 37.
[217] Exhibit B-11, BCUC IR 56.1.
[218] Exhibit B-18, BCUC IRs 109.2, 109.4.

Creative Energy states that all of these costs are outside of management's control, are material, and are consistent with the approach taken in the University of British Columbia Decision (Order C-11-14), which identified controllable and non-controllable costs.[219] Further Creative Energy states, in its opinion the Performance Term mechanism used by FAES in the Marine Gateway and Telus Garden project have an impact similar to this treatment in that all variances are captured and ultimately recovered from the ratepayer.[220]

With regard to the use of a separate deferral account outside of the RDDA, Creative Energy is of the view that if it was created to deal with "uncontrollable costs" it should have a carrying cost equivalent to the WACC, the same as the RDDA. Creative recognizes that a non-controllable cost deferral account could have a different recovery period and carrying costs, but recommends that such an account should have the same carrying cost (WACC) and recovery period (15 years) as the RDDA.[221]

Panel determination

The Panel approves a Variance Deferral Account to capture variances related to material items outside of management's control.

Specifically, the Panel approves the account to capture the following:

- **Variances in the NEFC customer revenues due to the difference between forecast load and actual load;**
- **Variances between actual and forecast Steam Service rates and FCAC charged to NEFC;**
- **Variances between actual and forecast Distribution Expenses including GL 870, 874 and 880; and**
- **Variances between actual and forecast Income Tax Expense.**

The Panel also approves variances between actual and forecast NEFC Special Service costs to be captured in this deferral account given that we have directed they be removed from Steam Service.

For the test period only, the Panel approves the variance in the rate base dependant expenses which include depreciation, ROE, and interest expenses to be captured in the Variance Deferral Account because of the uncertainty around the development of NEFC during the test period.

The Panel does not approve the deferral of variances for Power Pumping and Lease Space as it previously determined those costs relate directly to steam production and are not to be allocated to NEFC. Nor does the Panel approve variances in MAA fees as those are not considered to be material given their small amount. The Panel also does not approve deferral of variances for insurance expense as the Panel has set the insurance expense allocated to NEFC in 2016 and 2017 in Section 4.4.4 of the Decision, and therefore a variance would not be expected in the test period.

In making its decision the Panel considered the TES Guideline's principle to have the least deferral possible and also considered the term of the test period.

The Variance Deferral Account must be amortized over a one-year period with the amortization being recovered through the revenue requirements.

[219] Exhibit B-11, BCUC IR 56.1; Exhibit B-18, BCUC IR 109.2.
[220] Exhibit B-11, BCUC IR 56.4.
[221] Exhibit B-11, BCUC IR 56.7.

Normally it would be appropriate for the account to have carrying costs at the short term interest rate; however, given that Creative Energy will not be recovering the full revenue requirements at this time, the Panel approves a WACC until such time as amortization on the RDDA commences at which time the carrying costs will revert to a short term interest rate.

The Variance Deferral Account is approved for a five year period at which time Creative Energy must apply for renewal.

In future RRAs, Creative Energy is to report on the Variance Deferral Account in the same format as directed for the TPRCDA.

5.7 NEFC rate design

In the Creative Energy NEFC CPCN Decision the Commission approved a rate design with a fixed and variable component. The approved fixed/variable split was 63 percent variable component and a 37 percent fixed component.[222] Creative Energy in this application proposes to maintain the fixed/variable rate design but requests the ratios be revised for the following reasons:

- The Carbon Reduction Rider proposed in the CPCN application was rejected by the Commission and this changes the fixed/variable split as set out in that Decision; and
- The Steam Production and Steam Distribution cost allocations were characterized as variable costs in the CPCN proceeding but more properly should have been treated as fixed costs.

Creative Energy states that taking into account these changes results in a fixed/variable split of approximately 60 percent fixed and 40 percent variable. Creative Energy proposes to implement a rate design with a 50/50 split between fixed and variable charges as it is reasonably close to the underlying cost structure and is simple to communicate to customers.[223]

In Creative Energy's view, rate design involves trade-offs between multiple objectives which can include revenue certainty, accurate price signals to customers, conservation, and administrative simplicity (in addition to other objectives). In proposing a rate for NEFC, Creative Energy has sought to balance these objectives as well as the NEFC CPCN Decision. Creative Energy calculates that its cost structure is 58 percent fixed and 42 percent variable.[224] While a 60 percent fixed rate/40 percent variable rate approach would more closely match NEFC's underlying cost structure, Creative Energy notes this would reverse the ratio between fixed and variable rates specified in the NEFC CPCN Decision. In Creative Energy's view, a 50/50 rate design provides a reasonable balance of the objectives identified above, while being closer to the ratio between fixed and variable charges in the NEFC CPCN Decision.[225]

Creative Energy also considers it inappropriate to permanently fix the ratio between fixed and variable charges, as the relationship between fixed and variable costs will fluctuate over time as fuel prices and carbon taxes change. Creative Energy states that future changes in fuel prices may require a change to the variable charge to ensure that customers receive an economically efficient price signal.[226]

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[222] NEFC CPCN Decision, p. 68.
[223] Exhibit B-1A, p. 63.
[224] Exhibit B-8, CEC IR 44.1.
[225] Exhibit B-11, BCUC IR 59.1.
[226] Exhibit B-11, BCUC IR 59.1.

Submissions

CEC does not believe the 50/50 fixed/variable split has any particular advantages in terms of simplicity or communication with customers. CEC advocates a higher variable charge on the basis that it would encourage greater conservation. To this end CEC proposes a 40 percent fixed and 60 percent variable charge split.[227]

Commission Determination

In the NEFC CPCN Decision the Commission defined fixed costs as costs that do not vary with actual load.[228] Creative Energy in this proceeding states that while steam production and steam distribution are volume based allocation, they ultimately are fixed costs regardless of the cost allocation methodology since the NEFC costs are based on projected volumes for 2016 and 2017. This renders them as fixed costs from the NEFC perspective.[229] The position taken by the Commission in the NEFC CPCN Decision remains appropriate. Lower use by a customer reduces the steam requirements of NEFC and the rate design should reflect this. Therefore, the Panel finds that the ratio in the directive in the NEFC CPCN Decision remains directionally correct. **Recognizing that this ratio can and will vary over time, and should not include the Carbon Reduction Rider which was denied, the Panel determines that a 40 percent fixed/60 percent variable cost allocation is appropriate, reflecting the allocation principles in the NEFC CPCN Decision and providing an efficient price signal to consumers.** The Panel agrees with Creative Energy that this percentage may need to be reviewed and possibly varied as circumstances change in the future.

5.8 NEFC Service rates

5.8.1 NEFC Connection Agreement

Instead of filing the application for approval of the NEFC Connection Agreement (Terms and Conditions) in this Application, Creative Energy filed a separate Connection Agreement Application. On July 11, 2016, the Connection Agreement Application hearing was adjourned until the Commission made its decision on the CE's Application for Reconsideration and Variance of Order G-88-16. That decision was made by the Commission on September 26, 2016, dismissing CE's Application for Reconsideration and a Variance of Order G-88-16.

To date, there is no decision approving CE's Connection Agreement Application on an interim basis or otherwise.

As a result, Creative Energy is seeking approval of NEFC Service rates in this Application but is seeking approval of the NEFC Connection Agreement (Terms and Conditions) in a separate application before the Commission.

The issue the Panel must deal with is the effect of there being no Order by the Commission, interim or final, approving the NEFC Connection Agreement (Terms and Conditions) on this Panel's jurisdiction to approve NEFC Service rates.

Panel discussion

Creative Energy is requesting the Panel in this proceeding approve NEFC Service rates for 2016 and 2017.

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[227] CEC Final Submission, p. 36.
[228] NEFC CPCN Decision, p. 65.
[229] Exhibit B-1A, p. 63.

The UCA, RSBC 1996, c. 473 defines "Rate" in s. 1 as follows:

"rate" includes

a) a general, individual or joint rate, fare, toll, charge, rental or other compensation of a public utility,

b) a rule, practice, measurement, classification or contract of a public utility or corporation relating to a rate, and

c) a schedule or tariff respecting a rate;

Under the definition, a rate includes among other things, a contract of a public utility or corporation relating to a rate and a schedule or tariff respecting a rate. These are generally referred to as Terms and Conditions.

Therefore, Creative Energy is seeking approval of NEFC Service rates from this Panel in circumstances where the Panel will be unable to include approval of Creative Energy's proposed NEFC Connection Agreement (Terms and Conditions) as part of the NEFC Service rate because that application is before a separate Commission Panel.

Put simply, the Panel must determine whether it has the jurisdiction to approve a rate which does not include approval of the Terms and Conditions as required by the definition of "rate" in the UCA. It would certainly be more efficient if a rate and Terms and Conditions were approved in the same application. The rate would be decided and the applicant could begin charging the ratepayers. However, Creative Energy chose for practical reasons to apply for approval of the NEFC Connection Agreement (Terms and Conditions) in the separate Connection Agreement Application.

The Panel believes it would be too narrow an interpretation of "rate" to conclude that this Panel could not determine an appropriate rate for NEFC in this Application. However, because the definition of "rate" provides that it include Terms and Conditions, the Panel may determine a rate for NEFC only on a conditional basis. In effect, this Panel would be approving the NEFC Service rate on a conditional basis that the Terms and Conditions must be approved by another Panel before it meets the definition of "rate" under the statute.

Further, this interpretation would also be consistent with the principle of regulatory efficiency. There has been substantial evidence before this Panel, two rounds of IRs and written arguments from several interveners on whether the proposed NEFC Service rates are fair and reasonable, all of which would potentially be wasted and have to be repeated in another proceeding if this Panel was not able to determine the NEFC Service rates on a conditional basis.

The Panel finds that it has jurisdiction to approve the NEFC Service rates as final once Creative Energy has obtained approval of the NEFC Connection Agreement (Terms and Conditions) in its Connection Agreement Application before the Commission.

5.8.2 NEFC final 2016 and 2017 Rates

Creative Energy is requesting final approval for NEFC 2016 Rates at the conclusion of this proceeding and interim rates for January 1, 2017. Creative Energy requests that the final 2017 NEFC Service rates be based on the updated 2017 load forecast. Creative Energy has confirmed the final 2017 NEFC Service rate will not be different than the proposed 2017 interim NEFC Service rate because any difference in the revenue requirement will be captured in the deferral accounts.[230]

Commission determination

The Panel approves permanent NEFC Service rates for 2016 and 2017 as set out in the Application subject to the adjustments outlined in this Decision, effective the date the Commission approves the Terms and Conditions for NEFC on a permanent or interim basis.

Therefore, the Panel further determines that Creative Energy may not begin charging the final NEFC Service rate to its ratepayers until its NEFC Connection Agreement (Terms and Conditions) has received approval from the Commission.

The Panel has not approved Creative Energy's request to have rates set interim effective January 1, 2017 for NEFC pending approval of the updated 2017 load forecast because the permanent 2017 NEFC Service rates will not be different than the interim rates as any variance will be captured in NEFC's deferral accounts. For these reasons the Panel finds that making the 2017 NEFC Service rate interim would be inefficient and add unnecessary costs.

5.8.3 NEFC Compliance Filing

Creative Energy is directed to recalculate the 2016 and 2017 NEFC revenue requirements reflecting the adjustments outlined in this Decision in a compliance filing to be made no later than December 30, 2016.

The compliance filing must include:

- Updated NEFC Service rates in the same format as Exhibit B-1A, p. 64 including details of the calculation;
- Updated NEFC revenue requirement calculation in the same format as Table 24, Exhibit B-1A, p. 61, reflecting the Panel directed adjustments in this Decision and an updated income tax expense;
- Updated NEFC supporting regulatory schedules in the same format as those found in Exhibit B-1A, Appendix 9, including an explanation for each adjustment and a reference to the section of the Decision directing the adjustment;
- Calculation for the forecast Steam Charge and Fuel Cost Adjustment Charge to NEFC for 2016 and 2017 in a similar format to the schedules attached to Exhibit B-11, BCUC IR 49.3, including a detained calculation for 'Revenues from NEFC' for 2016 and 2017;
- Updated 2016 and 2017 RDDA addition;
- Baselines for 2016 and 2017 for each variances that the Variance Deferral Account will record; and
- Updated NEFC Hot Water Tariff Sheets – both black lined and clean.

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[230] Exhibit B-18, BCUC IR 111.2.

Dated at the City of Vancouver, in the Province of British Columbia, this 18th day of November 2016.

Original signed by:

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D. A. Cote
Panel Chair / Commissioner

Original signed by:

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W. M. Everett
Commissioner