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Utilities Commission

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June 12, 2019

Sent via email/eFile

CREATIVE ENERGY BEATTY/EXPO PLANTS CPCN AND REORGANIZATION	EXHIBIT A-30
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Mr. Rob Gorter
President and CEO
Creative Energy Vancouver Platforms Inc.
Suite 1 - 720 Beatty Street
Vancouver, BC V6B 2M1
rob@creative.energy; info@creative.energy

Re: Creative Energy Vancouver Platforms Inc. – Application for Certificate of Public Convenience and Necessity for the Expo–Beatty Plants and Reorganization – Project Number 1598962 – Information Request No. 1 on the Specified Scope

Dear Mr. Gorter:

Further to your April 26, 2019 revised filing of the above-noted application, enclosed please find British Columbia Utilities Commission Information Request No. 1 on the specified scope. In accordance with the regulatory timetable established by Order G-107-19, please file your responses on or before Friday, June 28, 2019.

Sincerely,

Original signed by:

Patrick Wruck
Commission Secretary

/aci
Enclosure



Creative Energy Vancouver Platforms Inc.
Application for a Certificate of Public Convenience and Necessity for
the Expo and Beatty Plant Project and Approvals Related to Reorganization

**INFORMATION REQUEST NO. 1 ON THE SPECIFIED SCOPE
TO CREATIVE ENERGY VANCOUCER PLATFORMS INC.**

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A. ADDITIONAL FINANCIAL SECURITY

**1.0 Reference: ADDITIONAL FINANCIAL SECURITY
Exhibit B-23, Appendix 3, p. 4
Amount of Additional Financial Security**

On page 4 of Appendix 3 in Exhibit B-23, Creative Energy Vancouver Platforms Inc. (Creative Energy) states:

1) Time Period

The parties have agreed to additional financial security during the period commencing from the earlier of Beatty Plant shutdown or the commencement of demolition of the exterior walls, foundation or roof of the existing building at 720 Beatty Street and lasting until the earlier of the transfer of legal title for the lands or the Stabilization Date outlined in Article 7 of the agreement.

.....

- Following the Stabilization Date, full legal title to the Lands (excluding the Airspace Parcels for the Beatty Plant and potentially Office Space that will be retained by Creative Energy) will have been transferred out of the utility.⁴ When that occurs, no further indemnities are required for risks arising from Creative Energy holding legal title to the Lands. Further, following the Stabilization Date, the value of the Lands and accumulating assets associated with the remainder of the development provide adequate security for the indemnities regarding any damage to Creative Energy’s utility equipment or property arising during the remainder of construction, which are also lowered following the completion of the upgraded Beatty Plant. [Emphasis Added]

⁴ Exhibit B-1, Appendix A (Trust and Development Agreement), s. 1.1(fff), p 7.

- 1.1 Please explain why the Stabilization Date, and not the Beatty Plant service commencement date, is the appropriate end period for the Performance Bond duration.
- 1.2 Please explain what the estimated duration and dollar value of the remainder of the construction period is after the Stabilization date, which is not covered by the proposed additional financial security.
 - 1.2.1 Please list all the Proposed Project milestones during remainder of construction period after the Stabilization Date.
- 1.3 Please explain how the value of the lands, following the Stabilization Date, would provide adequate security to Creative Energy in case of any damage to the utility's equipment or property during the remainder of construction. In your answer, please explain in detail how this would work in practice.
 - 1.3.1 As part of your answer, please provide specific details of how the value of the lands would provide adequate security. What would Creative Energy be required to do to gain access to that security?"
- 1.4 Does Creative Energy consider that the value of the lands, following the Stabilization Date, provide adequate security to Creative Energy for completion of the remainder of construction?
 - 1.4.1 If so, please explain in detail how the land value, in practice, would enable Creative Energy to ensure that the remainder of construction of the Proposed Project is completed.
 - 1.4.1.1 As part of your answer, please provide specific details of how the value of the lands would provide adequate security. What would Creative Energy be required to do to gain access to that security?"

**2.0 Reference: ADDITIONAL FINANCIAL SECURITY
Exhibit B-23, Appendix 3, p. 5
Amount of Additional Financial Security**

On page 5 of Appendix 3 in Exhibit B-23, Creative Energy states:

The total value of the work on the Beatty Plant including contingency and overhead but excluding demolition, civil work and building modifications is \$18.3 million⁶... In light of the total value of work anticipated prior to the Stabilization Date, the duration of the construction activities prior to the Stabilization Date (which will limit the magnitude of accounts payable that may be accumulated prior to a stoppage or legal action), the restrictions on financing by the Developer, and the replacement value of assets to be retained, the parties have agreed to an additional financial security of \$10 million for the duration of the period of security, which represents more than 50% of the expected value of work at Beatty Street prior to the Stabilization Date. [Emphasis Added]

⁶ Exhibit B-1, Appendix B (Proposed Project Costs Schedule), Beatty Energy Centre – Total, p 2.

Exhibit B-1 (Application), Appendix B shows that the total cost of the Proposed Project (before financing costs during construction) is \$48.9 million, including the \$18.3 million related to the Beatty Energy Centre. Including financing costs during construction, the total cost is \$53.1 million as shown on page 5 of the Application.

Creative Energy also stated in response to BCUC IR 31.5.1.1 that there are a number of cost elements (as listed in BCUC IR 31.5.1) which fall under the costs of the Developer's project and do not form part of the \$53.1 million costs of the Proposed Project.

Finally, on pages 3 to 4 of the Cover Letter in Exhibit B-23, Creative Energy provides a number of major updates to the overall project and Appendices 2 through 9 explain what Creative Energy and the applicable counterparties have done to address each of the Panel's eight requirements, respectively, per Order G-38-19.

- 2.1 Please explain why the value of the Beatty Plant, and not the estimated total capital cost of the Proposed Project is an appropriate amount of additional financial security.
- 2.2 Please explain why \$10 million is the appropriate amount of additional financial security given that the \$18.3 million of Beatty Plant projects costs excludes: i) financing costs during construction, ii) cost elements that fall under the costs of the Developer (some which relate to the Beatty Plant, such as, the construction of the Beatty Plant structure), iii) major updates to the overall project , and iv) costs (if any) to address each of the Panel's eight requirements per Order G-38-19.
 - 2.2.1 Should the amount of additional financial security be some higher amount to maintain the value of the financial security at 50 percent of the value of work at Beatty Street? Please explain why or why not.

3.0 Reference: ADDITIONAL FINANCIAL SECURITY
Exhibit B-23, Appendix 3, p. 6
Amount of Additional Financial Security

On page 6 of Appendix 3 in Exhibit B-23, Creative Energy states:

3) Form of Financial Security

The form of financial security will be a 50% Performance Bond with a face value of \$10 million that must be obtained from a licensed surety company.⁷ This means the performance bond will cover up to 50% of the project value to a maximum of \$10 million. The cost of this form of financial security is approximately \$400,000 for the first year, and \$50,000 per additional year of extension. The total estimated cost to the Developer is about \$500,000, which represents about 2.5% of the total direct budget for the Beatty Plant. [*Emphasis Added*]

- 3.1 Please confirm, or explain otherwise, that all costs associated with the additional financial security, as laid out in Appendix 3 “fall under the costs of the Developer’s project.”
- 3.2 Please explain how the cost stated for the suggested \$10 million Performance Bond was estimated to be \$400,000 in the first year, and \$50,000 per year thereafter.
- 3.3 Please explain whether the Creative Energy would be amenable to request from the Developer a Performance Bond with the term of the bond valid until the Beatty Plant service commencement date?
 - 3.3.1 If so, please provide the estimated cost of a Performance Bond with a face value of \$10 million with the term of the bond valid until the Beatty Plant service commencement date.
 - 3.3.2 With reference to your response in IR 20.2, please provide the estimated cost of a Performance Bond with a face value of the revised estimated total capital cost of the Proposed Project with the term of the Bond valid until the Beatty Plant service commencement date.
- 3.4 Does Creative Energy intend to provide the British Columbia Utilities Commission (BCUC) with a standard “Consent of Surety” (Agreement to Bond) to confirm that Surety will issue the required bond.

3.4.1 If so, please explain at what point such information will be provided.

**4.0 Reference: ADDITIONAL FINANCIAL SECURITY
Exhibit B-23, Appendix 3, p. 6
Amount of Additional Financial Security**

On page 6 of Appendix 3 in Exhibit B-23, Creative Energy states:

Marsh Canada Limited (Marsh) has been retained as Surety Broker. Marsh has provided a list of prequalified licensed surety companies, their respective A.M. Best Ratings⁸, and a standard form of Performance Bond for this type of exposure.

- 4.1 Please confirm, or explain otherwise, that Creative Energy will require the Developer to obtain an agreement from the Surety, via Riders, that will allow for material changes in the value or duration during the period under which the bond is active in order to ensure that such material changes do not negate the Performance Bond.
 - 4.1.1 Please specify how should such “material changes” in that agreement will be defined (e.g. change in the timeline, percent change in value of the agreement, etc.)
- 4.2 Please explain under which circumstances would Creative Energy declare default under the bond and take an appropriate action with the Surety.

B. EXPECTED EFFICIENCY IMPROVEMENTS

**5.0 Reference: EXPECTED EFFICIENCY IMPROVEMENTS
Exhibit B-5, Attachment 3.1; p. 9; Exhibit B-5-2, Attachment 15.3, p. 3;
Exhibit B-23, p. 4; Appendix 2-1, p. 55; Appendix 4, pp. 2-5;
Expected Efficiency Improvement as a result of the Proposed Project**

On page 4 of Exhibit B-23, Creative Energy provides a summary of the Proposed Project’s updated Milestone Schedule:

Milestone Schedule

2019	
June 3	CPCN Approval
July 4	Purchase Boilers - Expo Plant
September 30	Rezoning Approval – 720 Beatty
October 24	Issue for Construction Drawings – Expo Plant
December 6	Tender award – Expo Plant Construction

2020	
April 2	Start of Construction – Expo Plant
April 15	Development Permit Issuance – 720 Beatty
August 3	Building Permit Issuance – 720 Beatty
September 1	New Gas Service installed – 701 Expo and Expo Plant
September 30	Issue for Construction Drawings – 720 Beatty
October 5	Building Permit Issuance – 701 Expo
October 6	Start of Construction – 701 Expo
November 24	P2 Slab in place – 701 Expo (new fuel tanks can be placed)
December 14	Substantial Completion – Expo Plant and Interconnection lines

2021	
January 11	Expo Plant running
April 15	Beatty Plant Shutdown #1
	Beatty Demo/Abatement/Deconstruction
September 15	Beatty Plant Restart

The Energy Services Agreement between Creative Energy (formerly Central Heat Distribution Limited) and Clear Sky Energy Ltd. (Clear Sky), provided on page 9 of Attachment 3.1 to Exhibit B-5, states:

5.0 Contract Term

5.1 This contract shall commence on the date of execution hereof and continue until:

- (a) December 31, 2019. An additional contract term extension may be made if mutually agreed by the Client and the ESCO.
- (b) The parties agree to provide each other six months' written notice of their desire to extend the agreement.
- (c) At the end of the contract term the equipment will be removed from the Client's premises unless otherwise agreed by the Client and the ESCO.

5.1 The Beatty Plant is scheduled to be shut down on April 15, 2021 and the Energy Services Agreement with Clear Sky is scheduled to expire on December 31, 2019. Please explain whether Creative Energy intends to continue to operate the economizer at the Beatty Plant until the scheduled shut down of the Beatty Plant.

5.1.1 If not confirmed, please explain why not.

5.1.2 If not confirmed, please explain the impact this will have on customer rates.

5.2 Please explain whether Creative Energy has provided Clear Sky with written notice of a desire to extend the agreement beyond December 31, 2019.

5.2.1 If confirmed, please provide details of Creative Energy's discussions with Clear Sky, including whether or not Clear Sky is willing to extend the agreement and the maximum duration for which the agreement could be extended.

5.2.2 If not confirmed, please explain why not.

On pages 2 to 3 of Appendix 4 of Exhibit B-23, Creative Energy states that the estimated efficiencies for the Baseline, Proposed Project and the Alternative assume the removal of the Clear Sky economizer:

This baseline assumed that the Clear Sky economizer has been removed by 2023 at no cost to Creative Energy (in accordance with the agreement with Clear Sky) and has not been replaced....

- The Proposed Project includes removal and replacement of the existing building structure housing the Beatty plant, and the economizer must be removed before this work can begin. The baseline for evaluating the costs and benefits of the Proposed Project assumes that Creative Energy takes advantage of Clear Sky's obligation to remove the economizer at its cost such that the unit is removed by 2023....

The Alternative includes in-situ replacement of boilers and seismic upgrades to the building structure at Beatty⁸ which would also require removal of the economizer to enable that work. [Emphasis added]

⁸ Exhibit B-1, S 14, p 76-77.

Further on page 3 Creative Energy states, "A new economizer is included in the costs and benefits estimated for both the Proposed Project and the Alternative."

The Amended and Restated Trust and Development Agreement is provided in Appendix 2-1 of Exhibit B-23.

Page 55 of Appendix 2-1 states:

9. During the course of the construction of the New Plant Premises, the New Office, BC Place Plant and Project Utility Infrastructure, any variance to the Plans and Specifications proposed by Creative Vancouver will be subject to prior approval by the Developer pursuant to a change order request submitted in the standard change order form (a "**Change Order**") by Creative Vancouver.

5.3 Creative Energy states on pages 2 and 3 that the estimated efficiencies for the Baseline, Proposed Project and Alternative scenarios assume that the Clear Sky economizer is removed from the Beatty Plant. Please clarify the statement "[a] new economizer is included in the costs and benefits estimated for the Proposed Project and the Alternative."

5.3.1 Please clarify whether the Plant Gate Efficiency for the Proposed Project and the Alternative assume the use of an economizer at the Beatty Plant.

On page 2 of Appendix 4, Creative Energy states:

The Proposed Project includes removal and replacement of the existing building structure housing the Beatty plant, and the economizer must be removed before this work can begin.

On page 5 of Appendix 4, Creative Energy states:

Creative Energy confirms that new economizers at the renovated Beatty Plant are not included in the scope of the Proposed Project at Creative Energy's cost of \$15 million. Creative Energy confirms that it has the option to add scope to the Proposed Project

and that under the Trust and Development Agreement Creative Energy will bear the incremental cost of such discretionary scope changes¹². Creative Energy has previously considered adding economizers at the renovated Beatty plant, and if the Proposed Project is approved, during the detailed design process Creative Energy will consider the costs and benefits of adding one or more economizers to the renovated Beatty Plant.

¹² Exhibit B-1, s. 2, p 7.

- 5.4 Please explain whether as a result of the Proposed Project there would be sufficient on-site space for an economizer at the Beatty Plant.
- 5.5 With reference to the statement “Creative Energy has previously considered adding economizers at the renovated Beatty Plant”, please discuss why Creative Energy has decided not to include economizers at the renovated Beatty Plant.
- 5.6 Please discuss the circumstances under which Creative Energy would consider adding an economizer to the renovated Beatty Plant.
- 5.7 Please provide the total cost for the addition of an economizer at the Beatty Plant.
- 5.8 If an economizer were to be installed at the Beatty Plant as part of the Proposed Project, please explain, with rationale, whether Creative Energy would install the economizer at its own cost or seek to enter into a similar agreement to that of the existing agreement with Clear Sky.

On page 3 of Attachment 15.3 to Exhibit B-5-2, Creative Energy states:

The effect of the secondary economizer on the plant gate efficiency was determined based on energy metering provided with this equipment versus plant fuel usage for 2017 on a month by month basis. With this equipment a 2.73 percent fuel savings was realized in 2017

- 5.9 Please provide the percentage annual load that Creative Energy anticipates that the renovated Beatty Plant will deliver.
- 5.10 With reference to your response to IR 4.9, please provide the estimated natural gas consumption savings, the 2023 Fuel Cost Adjustment Charge (FCAC) Impact and Net 2023 Bill Impact resulting from the addition of an economizer to the renovated Beatty Plant. Please detail all assumptions.

On page 4, Creative Energy provides Table 1:

Table 1: Alternate 2023 Rate Impact Analysis

Scenario Description	Baseline efficiency used in Application – assumes the Clear Sky equipment has been removed by 2023	Alternate baseline efficiency – uses effective efficiency as at 2019
Plant Gate Efficiency in the absence of the Proposed Project	80.4%	81.0%
2023 Steam Tariff Impact	+15.6%	+15.6%
2023 FCAC Impact	-4.2%	-3.6%
Net 2023 Bill Impact	+3.7%	+4.1%

- 5.11 Starting at a Proposed Project Plant Gate Efficiency of 81 percent and increasing incrementally by 0.5 percent, up to 84 percent, please provide a sensitivity analysis of the 2023 FCAC Impact

and Net 2023 Bill Impact for the Proposed Project against the alternate baseline efficiency.

6.0 Reference: EXPECTED EFFICIENCY IMPROVEMENTS
Exhibit B-23, Appendix 4, p. 5
Potential Economizers

On page 5 of Appendix 4 in Exhibit B-23, Creative Energy states:

Creative Energy confirms that it has the option to add scope to the Proposed Project and that under the Trust and Development Agreement Creative Energy will bear the incremental cost of such discretionary scope change... if the Proposed Project is approved, during the detailed design process Creative Energy will consider the costs and benefits of adding one or more economizers to the renovated Beatty Plant. [*Emphasis Added*]

- 6.1 Notwithstanding that a decision has not yet been made on whether one or more economizers will be added to the renovated Beatty Plant, please provide a sensitivity analysis or “rule of thumb,” with calculations, for the impact on rates in 2023 of each potential dollar spent on economizers. Please round to the nearest thousands or millions of dollars for the appropriate cost of an economizer, as needed.
- 6.2 For clarity, please discuss whether Creative Energy will seek to recover from ratepayers the cost of adding one or more economizers at the renovated Beatty Plant if Creative Energy decides during the detailed design process to add new economizers to the scope of the Proposed Project.
- 6.2.1 If yes, please explain the expected timing and regulatory process contemplated by Creative Energy with respect to seeking approval from the BCUC to recover the cost of new economizers at the renovated Beatty Plant.

C. CONTINGENCY PLAN

7.0 Reference: CONTINGENCY PLAN
Exhibit B-23, Appendix 5, pp. 1-2; Appendix 5-1.
Contingency Plan Responsibilities and Overview

On page 1 of Appendix 5, Creative Energy states:

Creative Energy has engaged the TES Group of Edmonton, Alberta as subject matter experts in the area of developing and implementing plans to provide temporary steam production measures for industrial applications. The TES Group has significant experience with this type of undertaking.

The TES Group has assisted Creative Energy with developing the contingency plan.

In Appendix 5-1, Creative Energy provides a Contingency Plan Report, preliminary risk assessment and the experience of the TES Group.

Page 38 of Appendix 5-1 states:

A final report will be prepared and submitted with detailed back up presenting recommendations and estimates associated with the final Contingency Plan Scope of Work and installation of temporary rental boilers.

If this proposal is in line with Creative Energy’s needs and requirements, TES will

produce a detailed cost estimate summary to perform this work. [Emphasis added].

- 7.1 Please confirm, or otherwise explain, whether the TES Group’s report, as provided in Appendix 5-1, is a proposal for developing a Contingency Plan.
 - 7.1.1 If confirmed, please provide a detailed explanation of the next steps in developing the Contingency Plan.
- 7.2 Please confirm, or otherwise explain, whether the TES Group’s proposal is “in line with Creative Energy’s needs and requirements.” Please discuss why or why not.
- 7.3 Please explain the objectives of the Contingency Plan. In your response please detail all the risks that the plan is aiming to mitigate.
- 7.4 Please confirm, or otherwise explain, whether Creative Energy is the party responsible for implementing the Contingency Plan.
 - 7.4.1 If not confirmed, please provide the name of the party responsible, for example, General Contractor, Developer, TES Group etc.
- 7.5 Please confirm, or otherwise explain, whether Creative Energy (or the responsible party identified above) will engage the TES Group, or another qualified and experienced party, as the subject matter expert to develop and/or implement the Contingency Plan.
 - 7.5.1 If confirmed, please discuss the subject matter expert’s responsibilities with respect to the Contingency Plan (either development or implementation).
- 7.6 In the event that a Certificate of Public Convenience and Necessity (CPCN) is granted for the Proposed Project, does Creative Energy commit to delivering all aspects of the Contingency Plan and adopting the recommendations made by the subject matter experts?

On page 2, Creative Energy states:

The contingency plan does not include, for example, detailed piping design of the boiler tie-ins, or a full risk assessment of the connection and operation of the temporary boilers. That work is at a level of detail that it must be done in concert with the detailed design of the entire project, which will follow CPCN approval.

Directive 3.II.i of the Decision with accompanying Order G-38-19 (Decision) requires Creative Energy to develop a “comprehensive Contingency Plan” which addresses the identified issues in the Decision.

- 7.7 Please discuss whether Creative Energy considers the TES Group’s report, provided in Appendix 5-1, to be a comprehensive Contingency Plan that addresses all the identified issues in the Decision.
 - 7.7.1 If so, please discuss how the presented Contingency Plan addresses the identified issues.
- 7.8 Please explain whether Creative Energy contemplates filing the final Contingency Plan with the BCUC.
 - 7.8.1 If confirmed, please explain when Creative Energy would file the final Contingency Plan.

**8.0 Reference: CONTINGENCY PLAN
Exhibit B-1, pp. 56-57; Exhibit B-23, p. 4; Appendix 5, pp. 4-5;
Appendix 5-1, p. 14; Appendix 7-1, p. 1
Beatty Plant Shutdowns**

On pages 56 to 57 of the Application, Creative Energy provides Table 7, which summarizes the scope of work required for each of the three plant shutdowns:

Table 7 - Construction Milestones

1	BCUC Approval	Dec. 31, 2018
2	Order Expo boilers	Dec 2018
3	Start of Expo Plant construction	Jan 2019
4	Early works (new fuel tanks & interconnection)	May 2019
5	Completion of Expo Plant and early works	Oct 2019
6	Phase 1 commissioning	Nov-Dec 2019
7	Relocation of office staff	Jan 2020
8	Shutdown #1 of Beatty Plant <ul style="list-style-type: none"> • Abatement and demolition of Boilers #1, #2 and #4 • Relocation of gas service • Relocation of feedwater pumps 	April 2020
9	Restart #1 of Beatty Plant	Oct 2020
10	Demolition and excavation of east area	Oct 2020 – April 2021
11	Shutdown #2 of Beatty Plant <ul style="list-style-type: none"> • Relocation of BC Hydro service • Temporary water service • Install temporary flue for Boiler #3 	April 2021
12	Restart #2 of Beatty Plant	Oct 2021
13	Below grade to L4 slab (below flues)	Oct 2021-April 2022
14	Shutdown #3 of Beatty Plant	April 2022
	<ul style="list-style-type: none"> • Extend breeching to L18 • Connect boilers to breeching • Remove temporary flues • Reinstate permanent water service 	
15	Restart #3 of Beatty Plant (final)	Oct 2022
16	Complete office tower development	2023

On pages 4 to 5 of Exhibit B-23, Creative Energy provides a summary of the Proposed Project’s updated Milestone Schedule:

Milestone Schedule

2019	
June 3	CPCN Approval
July 4	Purchase Boilers - Expo Plant
September 30	Rezoning Approval – 720 Beatty
October 24	Issue for Construction Drawings – Expo Plant
December 6	Tender award – Expo Plant Construction

2020	
April 2	Start of Construction – Expo Plant
April 15	Development Permit Issuance – 720 Beatty
August 3	Building Permit Issuance – 720 Beatty
September 1	New Gas Service installed – 701 Expo and Expo Plant
September 30	Issue for Construction Drawings – 720 Beatty
October 5	Building Permit Issuance – 701 Expo
October 6	Start of Construction – 701 Expo
November 24	P2 Slab in place – 701 Expo (new fuel tanks can be placed)
December 14	Substantial Completion – Expo Plant and Interconnection lines

2021	
January 11	Expo Plant running
April 15	Beatty Plant Shutdown #1
	Beatty Demo/Abatement/Deconstruction
September 15	Beatty Plant Restart

2022	
March 25	Beatty Plant Shutdown #2
	Advance elevator core and boiler flues P3 to Roof
	Connect Boilers #3, #5 and #6 to new flues
September 21	Beatty Plant Restart

2023	
November 10	Beatty Redevelopment Substantial Completion

In its Application, Creative Energy anticipated three shutdowns of the Beatty Plant, however as indicated on page 4 of Exhibit B-23, the number of shutdowns has since been reduced to two.

Page 1 of Appendix 7-1 to Exhibit B-23 shows the Relocation of Gas Line, Hydro and Water as one day milestones.

- 8.1 Please explain why it is no longer necessary to shut down the Beatty Plant in order to relocate British Columbia Hydro and Power Authority's (BC Hydro) service.
 - 8.1.1 Please clarify Creative Energy's plans with respect to relocating the service and the schedule for completing the work.
- 8.2 Please explain why it is no longer necessary to shut down the Beatty Plant in order to relocate the water service.
 - 8.2.1 Please clarify Creative Energy's plans with respect to relocating the service and the schedule for completing the work.
- 8.3 Please explain why it is no longer necessary to shut down the Beatty Plant in order to relocate the gas service.
 - 8.3.1 Please clarify Creative Energy's plans with respect to relocating the service and the schedule for completing the work.
- 8.4 Please discuss any risks to the safe and reliable supply of service that could arise as a result of

relocating the electrical, gas and water services whilst the Beatty Plant is still in operation. In your response, please provide details of Creative Energy’s proposed mitigation strategies.

Page 14 of Appendix 5-1 states that the TES Group’s Take-Aways from the site walkdown included:

- Confirmation that the need for temporary or back up steam production should be no longer than six months (one winter).

8.5 Please confirm, or explain otherwise, that on September 15, 2021 and September 21, 2022, when the Beatty Plant restarts are scheduled, temporary boilers will not be on-site, commissioned and ready for operation, with trained operators.

8.5.1 If confirmed, please discuss the risks and how Creative Energy intends to mitigate these risks.

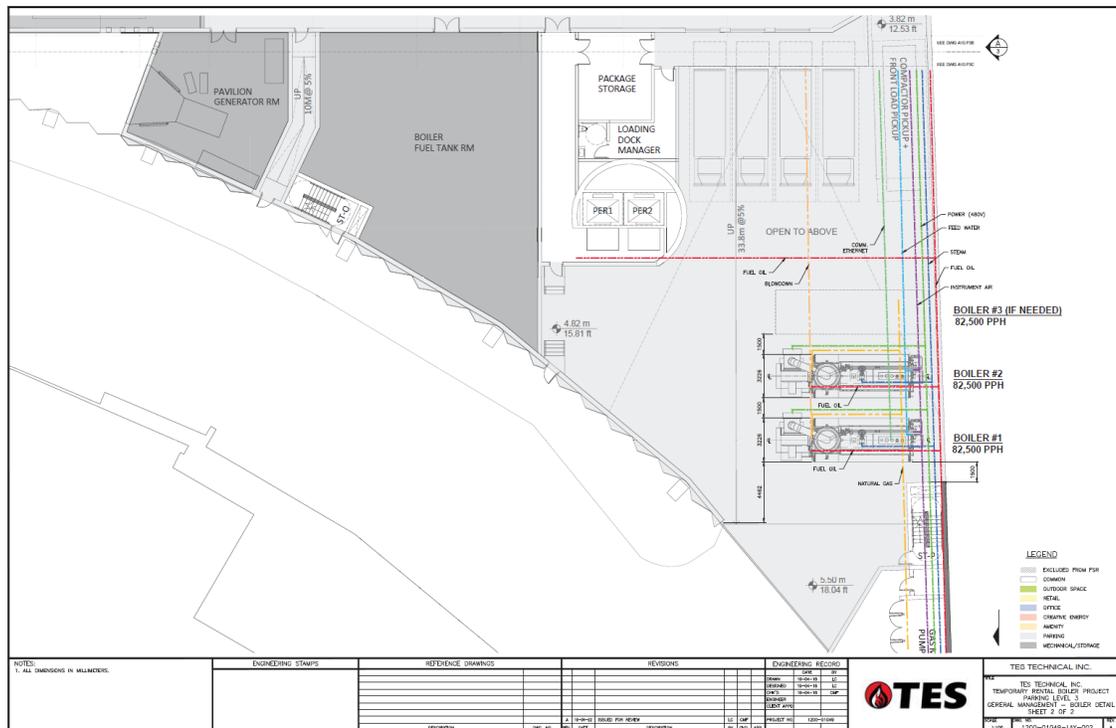
8.6 Please explain why the Contingency Plan provided in Appendix 5-1 states that the need for temporary or back up steam production “should be no longer than six months (one winter)” given that the Milestone Schedule identifies two Beatty Plant shutdowns.

**9.0 Reference: CONTINGENCY PLAN
Exhibit B-23, Appendix 5-1, p. 26; Appendix 5-1, Appendix D.1, p. 1
Rental Boilers Size**

Page 26 of Appendix 5-1 states:

- **Boiler Capacity** – Based upon the availability and what the rental industry has for a common design range in their portable rental boiler fleet, we recommend a rental boiler in the range of 75,000 to 85,000 pph, providing saturated steam at 350 psig or less. A total of three (3) rental boilers will be required to meet the full load steam requirements of the winter period

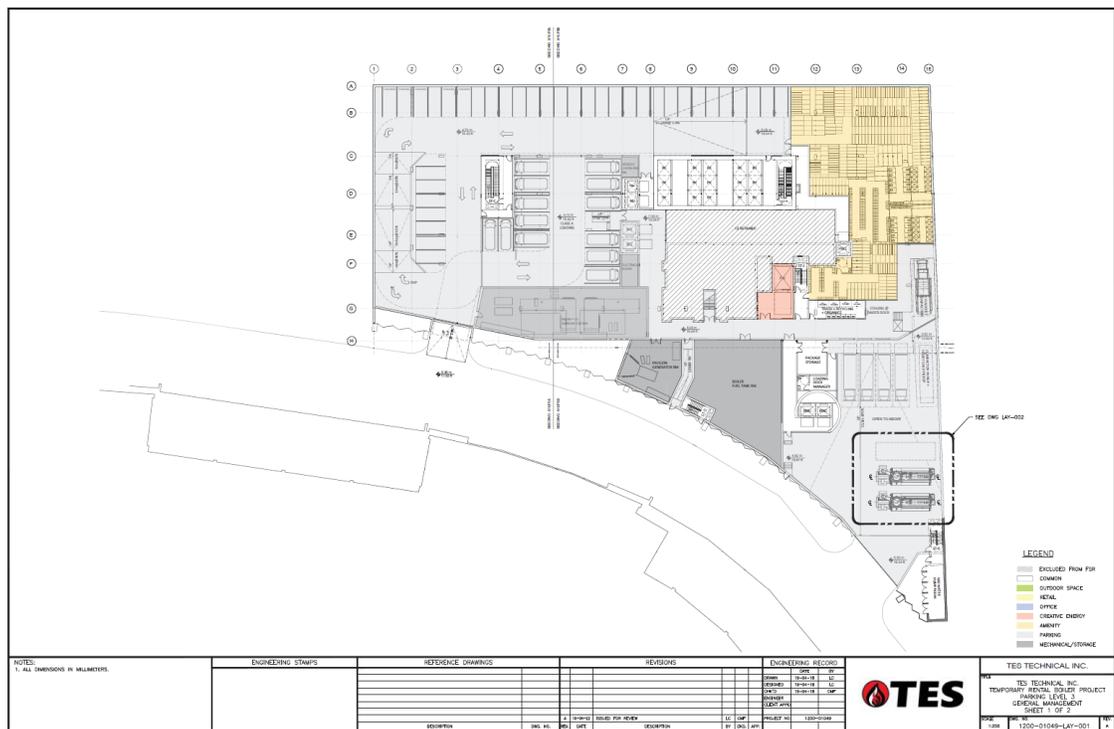
Drawing 1200-01049-LAY-002 on page 1 of Appendix D.1 to Appendix 5-1 indicates the proposed location for the rental boilers:



- 9.1 Please explain how Creative Energy will determine the temporary boiler capacity that would be required if the Beatty Plant failed to restart. For example, historical load data, weather forecasts, forecasted duration of Beatty Plant outage etc.
- 9.2 In the event that the Beatty Plant failed to restart, or experienced issues with operation, such that temporary boilers are required, please confirm the temporary boiler capacity in pounds per hour (pph) that would be required to meet the load. In your response, please explain whether the capacity was determined based on the need to supply 100 percent of the peak winter load and provide any assumptions made.
- 9.3 On page 25 of Appendix 5-1, the boiler capacity is stated to be three (3) 75,000 to 85,000 pph, which equates to 255,000 pph. Please explain why drawing 1200-01049-LAY-002 states “Boiler #3 (if needed).” Please reference your responses to IRs 8.1 and 8.2 as necessary.
 - 9.3.1 Please explain the circumstances under which Boiler #3 would not be required. In your response, please discuss at what point in the Project Schedule, Creative Energy would be able to determine whether or not Boiler #3 would be required.

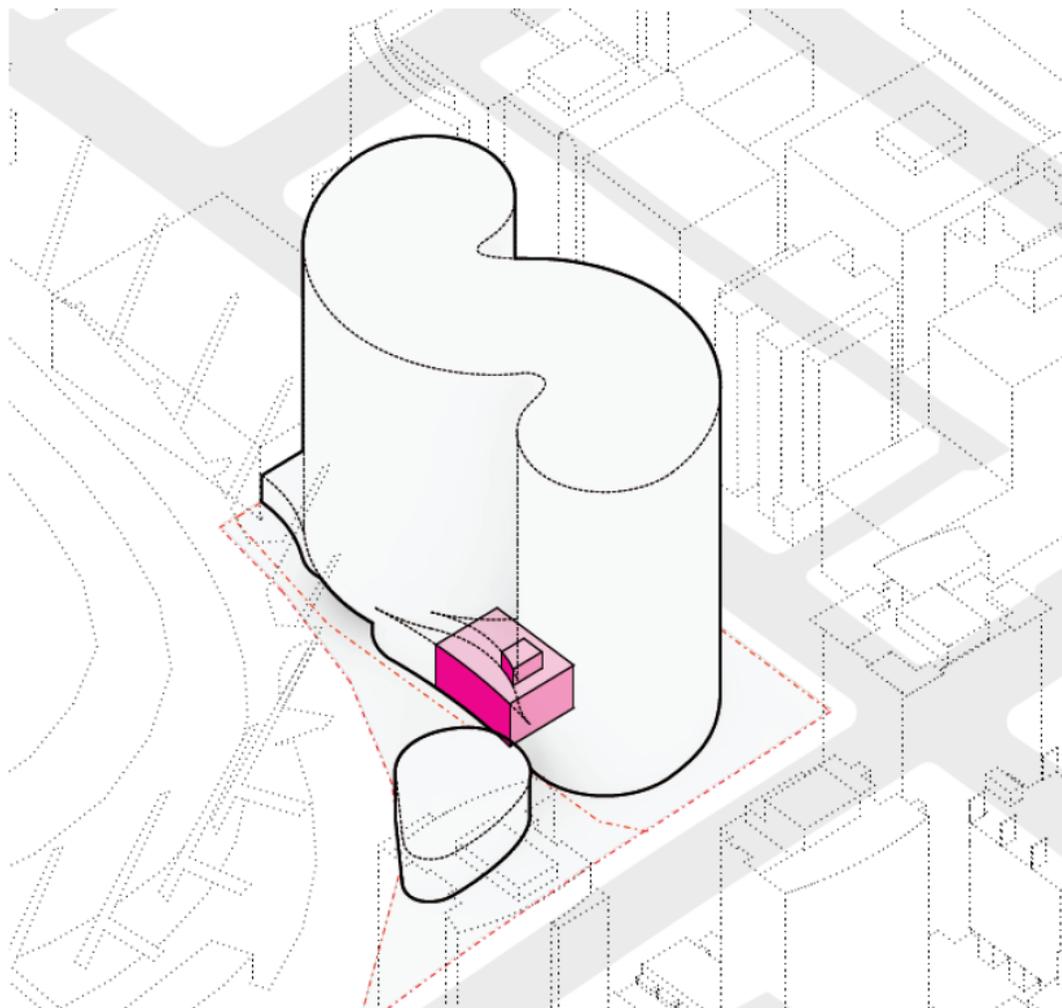
10.0 Reference: CONTINGENCY PLAN
Exhibit B-1, p. 47; Exhibit B-5, BCUC IR 28.1;
Exhibit B-23, Appendix 5-1 p. 31; Appendix D.2, p. 1
Rental Boilers Location

Drawing 1200-01049-LAY-001 on page 1 of Appendix D.2 to Appendix 5-1 indicates the proposed location for the rental boilers:



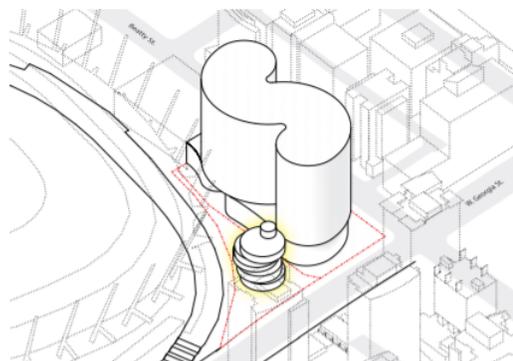
On page 47 of Exhibit B-1, Creative Energy provides Figure 9 which is a rendering of the Beatty Plant within the New Office Tower:

Figure 9 - Rendering of Beatty Plant within the New Office Tower



Page 35 of the Design Rationale document filed as part of the Rezoning Application for 720 Beatty Street¹ (Rezoning Application) provides the following drawing, which identifies the location of the Entertainment Pavilion:

ENTERTAINMENT PAVILION
A retail and entertainment pavilion is added to the plaza to further activate the public realm between our building and BC Place.



In response to BCUC IR 28.1 (Exhibit B-5), Creative Energy states:

The boiler plant would be sited on the 701 Expo lot where the land is available

¹ <https://rezoning.vancouver.ca/applications/720beatty2/documents/720Beatty-DesignRationale.pdf>

throughout the first shutdown of the Beatty Plant.

- 10.1 Please confirm, or otherwise explain, whether the location for the temporary boilers identified in drawing 1200-01049-LAY-001 is the same as the proposed location of the Entertainment Pavilion provided in the Rezoning Application.
 - 10.1.1 If confirmed, please provide details of the proposed construction schedule for the Entertainment Pavilion, explaining how the construction schedule accommodates Creative Energy's need to have temporary boilers on-site and operational for both Beatty Plant restarts.
 - 10.1.2 If not confirmed, please provide a site plan, showing the location of the temporary boilers in relation to the Entertainment Pavilion.
- 10.2 Please confirm, or otherwise explain, whether the location identified in drawing 1200-01049-LAY-001 was selected based on discussions with the Developer, and any other stakeholders.
- 10.3 Please confirm, or otherwise explain, whether this location will be available to Creative Energy for the entire duration of the Proposed Project, and not only the "first shutdown", as stated in response to BCUC IR 28.1.
 - 10.3.1 If not confirmed, please explain where the temporary boilers will be located when the Beatty Plant will be restarted in September 21, 2022.
 - 10.3.2 If not confirmed, please provide information on Creative Energy's rights to access this location and any periods where the area will be used by the Developer or others.

Page 31 of Appendix 5-1 states:

The rental boilers are most often fitted with a weather proof enclosure intended to protect the main instrumentation and controls located at the front of the boiler. In some cases, due to the environment, physical location and nature/sensitivity of the setting, these rental boilers are completely enclosed into a temporary fabric or other structure.

- 10.4 Please explain whether there is sufficient space at the location shown in drawing 1200-01049-LAY-001 or the location provided in response to IR 10.3.1 to accommodate the weather proof enclosure.
- 10.5 Please confirm, or otherwise explain, whether Creative Energy intends to install a weather proof enclosure to protect the temporary boilers.
 - 10.5.1 If confirmed, please explain whether the costs for a weather proof enclosure are included in the total costs provided in response to IR 17.3.
 - 10.5.2 If not confirmed, please explain how Creative Energy intends to protect the temporary boilers.

**11.0 Reference: CONTINGENCY PLAN
Exhibit B-23, Appendix 5-1, pp. 7, 8, 10-11, 24, 39
Rental Boilers Trigger Window**

Page 24 of Appendix 5-1 states:

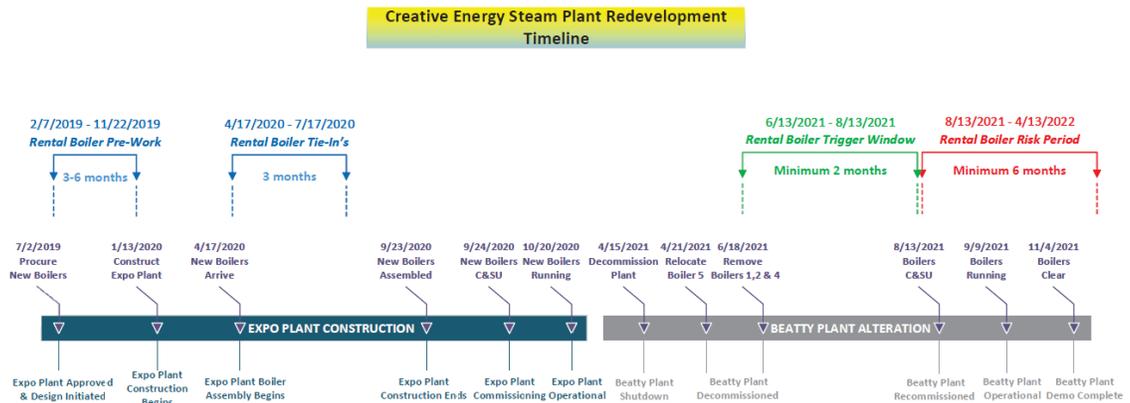
It will not make economic sense to have the temporary boilers on site for the duration of the construction period and so the Contingency Plan will have to position CREATIVE ENERGY to be able to quickly bring them in and make them operational.

Pages 10 and 11 of Appendix 5-1 states:

The Temporary Boiler Subproject is expected to take 8-11 months, from initiation to commissioning. The major steps include:

<u>Task</u>	<u>Duration</u>
Rental Boiler Pre-Work	3-6 months
Rental Boiler Tie-In's and Services	3 months
Rental Boiler Sourcing & Shipping	1 month
Assembly and Construction	1 month
C & SU and Operator Training	1-2 weeks
Dis-Assembly and Return	1-2 weeks

Page 39 of Appendix 5-1, provides a timeline for the Temporary Boiler Subproject:



- 11.1 Please explain how Creative Energy will determine that temporary rental boilers are required, for example, Beatty Plant fails to start, project schedule is delayed etc. Please explain all scenarios and timelines considered.
 - 11.1.1 Please explain who is responsible for deciding that temporary rental boilers are required, for example, Chief Engineer, Director of Operations, Project Committee etc.
 - 11.1.2 Please confirm, or explain otherwise, whether the decision to use temporary rental boilers is at the sole discretion of Creative Energy.
 - 11.1.2.1 If not confirmed, please provide details of any other parties that must approve the decision to use temporary rental boilers and provide details of the process for gaining approval.
- 11.2 Other than the failed start-up of the Beatty Plant, please explain by what other means would Creative Energy know that temporary rental boilers are needed.
- 11.3 In the event that the Beatty Plant fails to start or experiences problems with operation following re-start, please explain how long Creative Energy would work at resolving the issue before making the decision to call in temporary rental boilers.
- 11.4 Assuming that all “pre-work” and “tie-ins and services” are completed, Creative Energy states that it will take 2.5 months from the time that it determines that temporary rental boilers are required to the time that the boilers have commissioned and ready to be operated by trained personnel. Please confirm, or otherwise explain, whether there could be any periods of interrupted service or load shedding if the Beatty Plant experienced any of the issues discussed in 10.2 and 10.3.

11.4.1 If confirmed, for how long could service interruption or load shedding last? Please provide the minimum and maximum periods and the load impacts, both in lb/hour and percentage of total demand.

Pages 7 and 8 of Appendix 5-1 state:

It would be cost-prohibitive to have the temporary boilers on site for the entire construction period and so one of the key objectives of the **Temporary Boiler Subproject** is to identify all of the preparations that are required to support temporary boilers or other backup steam plant equipment being quickly incorporated and operational in the event they are needed. [Emphasis added]

11.5 Please discuss whether Creative Energy could reduce the 2.5 month period required to source, ship, assemble construct, commission, start-up and train operators so that it can quickly incorporate and operate the temporary boilers. Please discuss the options available to Creative Energy.

**12.0 Reference: CONTINGENCY PLAN
Exhibit B-23, Appendix 5-1, pp. 10, 26, 43
Rental Boilers Availability**

Page 10 of Appendix 5-1 states:

Each of the recommended 82,500 pph trailer mounted rental boilers will have a shipping weight of approximately 86,720 lbs., with the boiler alone weighing 63,545 lbs. These temporary rental boilers are readily available from multiple suppliers and are only sourced in the US.

12.1 Please provide a list of all suppliers that can provide the temporary rental boilers and their location.

Page 26 states:

- **Boiler Design** – Any rental boiler selected must comply with the required BC regulatory requirements, and thus the boiler must be designed/fabricated to include [Canadian Registration Number] registration for [Technical Safety BC] acceptance, and the burners must comply with CSA B-149.3 standards

12.2 Please explain which of the suppliers listed in IR response 11.1 are able to provide rental boilers that meet all design and code / authority requirements for British Columbia, including being designed to include Canadian Registration Number (CRA) for Technical Safety BC acceptance and comply with CSA standards.

Page 43 states that the likelihood of the risk of the temporary boilers being unavailable is ‘Moderate’ resulting in a high risk level:

7.6 Execution Risks

Potential Risk	Likelihood	Consequence	Risk	Mitigation
Schedule trigger delayed	Moderate	Moderate	High	Consider load shed lternative
Boilers Unavailable	Moderate	High	High	Have alternate sources for rental boilers
	Moderate	Moderate	Moderate	

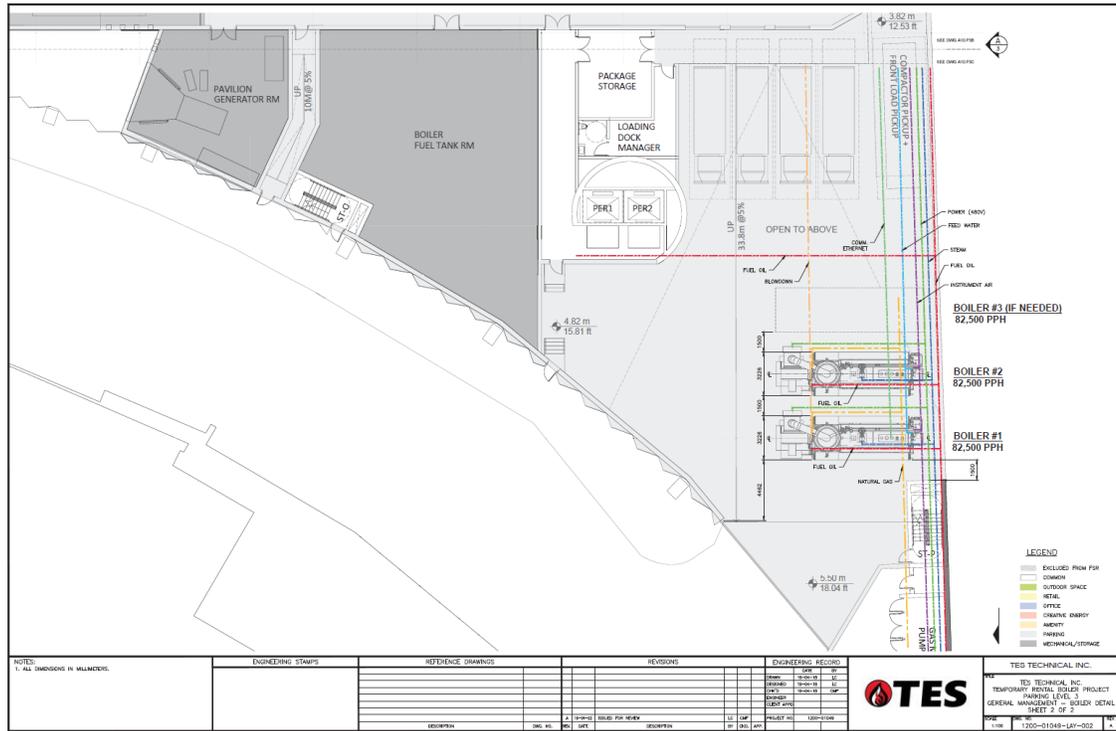
- 12.3 Please explain why the risk of the boilers being unavailable is moderate if the “temporary rental boilers are readily available from multiple suppliers.”
- 12.4 Please explain Creative Energy’s plan to mitigate the high risk of the boilers being unavailable.
- 12.5 Please explain when Creative Energy plans to enter into a contract with the selected boiler supplier, for example, during the ‘Rental Boiler Trigger Window’, at the commencement of the Proposed Project, at the shutdown of the Beatty Plant.
- 12.5.1 Please explain how this mitigates the risk of the boilers being unavailable.

13.0 Reference: CONTINGENCY PLAN
Exhibit B-1, p. 35; Exhibit B-23, Appendix 5-1, pp. 9, 11, 24, 32-33;
Appendix D.1, p. 1
Rental Boilers Services

Page 9 of Appendix 5-1 states:

- **Fuel System** – The rental boiler will require a supply of both natural gas and fuel oil so that it can operate on dual fuels.
- **Boiler Feedwater** – The rental boiler will require treated and heated BFW at pressure and tested to ensure that it meets ASME boiler feedwater quality requirements of the boiler.
- **Boiler Chemicals** – The rental boiler will require the required boiler chemicals used for additional steam and condensate treatment.
- **Plant Utilities** – The rental boilers will require the following plant utilities:
 - **Plant Power** – The rental boiler will require 480V power to meet its electrical needs.
 - **Plant Instrument Air** – The rental boiler will require instrument air for its operation
 - **Plant Controls** – The rental boilers and plant operating personnel will require a communication connection to the plant’s DCS (Delta V system)
 - **Vents/Drains** – The rental boilers will require lines to deal with both operating boiler blowdown streams as well as periodic boiler drain streams by cooling and containing these sources. The plant also has the ability to deal with venting streams from the boiler during normal operation (fill and start-up vents) and upset conditions (PSV’s)

Drawing 1200-01049-LAY-002 on page 1 of Appendix D.1 to Appendix 5-1 indicates the proposed location for the rental boilers and illustrates the various utility service supplies to the temporary rental boilers including, power, feedwater, instrument air, natural gas, fuel oil, communications, etc.



Page 33 of Appendix 5-1 states:

- The will be risk associated with the type and amount of redevelopment activity planned for the existing Beatty Steam Plant. It would be wise to locate any “back up” or redundant steam production well away from the existing plant to avoid possible risks/impacts encountered during the scheduled site construction

On page 35 of Exhibit B-1, Creative Energy states that the Proposed Project includes:

- Interconnection of steam, condensate and fuel oil services between the Expo and Beatty Plants

13.1 The Proposed Project is stated to include the interconnection of steam, condensate and fuel oil services between the Beatty Plant and the Expo Plant. Please explain whether any other services, such as power or instrument air will be interconnected between the two plants. Please provide details of any proposed interconnections.

13.1.1 If confirmed, please explain whether the service(s) will be reliable. In your response please discuss any risks that construction work at the Beatty Plant may pose to the reliability of the service for the Contingency Plan and Creative Energy’s plans to mitigate the risk.

13.2 Please explain from which Plant (Beatty or Expo) the Fuel System, Boiler Feedwater and each plant utility identified on page 9 of Appendix 5-1 and drawing 1200-01049-LAY-002 will be provided.

13.2.1 If any are to be taken from the Beatty Plant, please explain whether the service will be reliable. In your response, please discuss any risks that construction work at the Beatty Plant may pose to the reliability of the service and Creative Energy’s plans to mitigate the risk.

13.3 If any are to be taken from the Expo Plant, please confirm, or otherwise explain, whether the service supply capacity is sufficient to meet the supply requirements of the additional temporary rental boilers.

13.4 Please confirm, or otherwise explain, whether the operation of the temporary rental boilers will require any aspect of the Beatty Plant to be operational. Please provide details of any such equipment or services.

13.4.1 If confirmed, please discuss any alternative options available.

13.5 If the temporary rental boilers require new plant utilities to be installed, please provide details of any such plant utilities, including the timelines for installation.

Page 9 of Appendix 5-1 further states:

- **Boiler Fuel** – To ensure redundancy similar to what the existing heating plant has in place for fuel supply, we recommend that the rental boiler have the ability to operate with dual fuels – natural gas and #2 fuel oil

Page 24 states:

- **Fuel System** – The rental boiler may require a supply of both natural gas and fuel oil so that it can be operated on dual fuels. Storage of fuels may be problematic and/or require permits.

13.6 Please confirm, or otherwise explain, whether the temporary rental boilers will have the ability to operate with dual fuels.

13.6.1 If confirmed, please explain whether the fuel oil will be provided from the new fuel oil storage tanks to be installed as part of the Proposed Project.

Page 11 of Appendix 5-1 states:

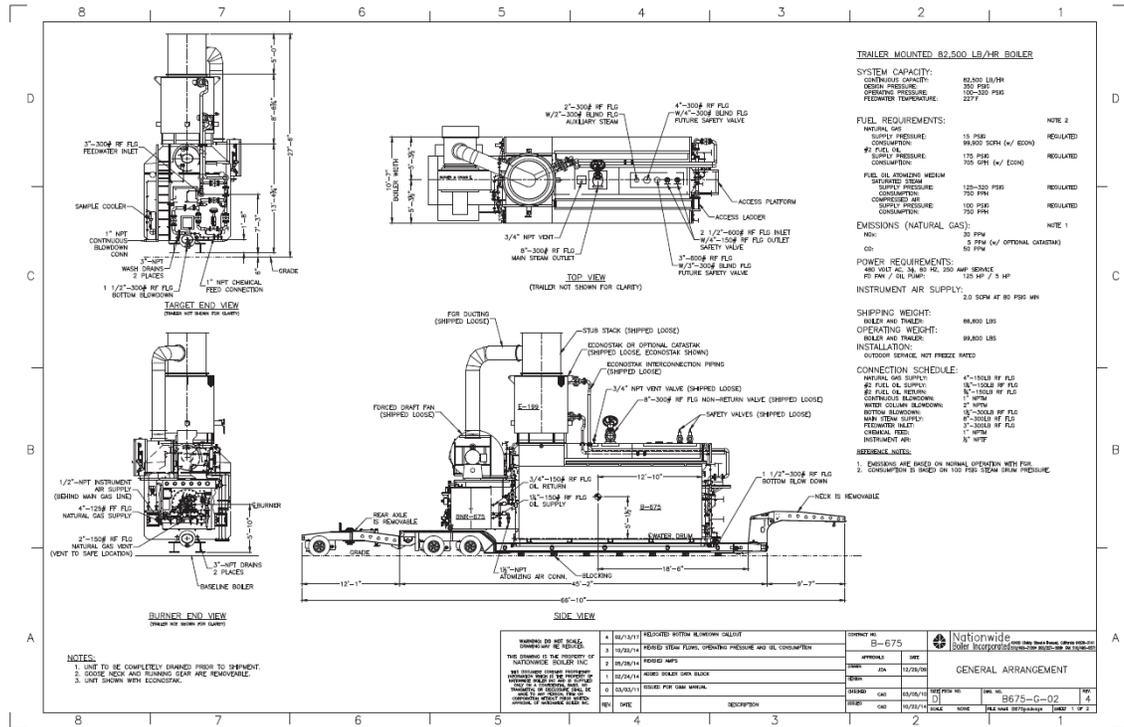
Much of the front-end tie-in design and installation work is expected to be timed (piggybacked) with the construction of the Expo Plant; the assumption is that mechanical engineering, field construction of tie-ins can be completed by shared resources.

13.7 Please confirm, or otherwise explain, whether the TES Group’s assumption that the “mechanical engineering, field construction of tie-ins can be completed by shared resources” is correct.

13.7.1 If not confirmed, please discuss Creative Energy’s plans.

13.7.2 If not confirmed, please update the Project Schedule accordingly.

Page 32 of Appendix 5-1 provides an illustration of a similarly sized rental boiler when fully assembled:



13.8 Please confirm, or otherwise explain, whether it would be necessary to extend the rental boilers' flue stacks beyond the Georgia Viaduct.

13.8.1 If confirmed, please provide the cost to extend the flues and explain whether the costs are included in the total cost provided in response to IR 17.3.

14.0 Reference: CONTINGENCY PLAN
Exhibit B-23, Appendix 5-1, p. 9
Rental Boilers Operators

Page 9 of Appendix 5-1 states:

- **Boiler Operations and Maintenance** – The rental boilers will require qualified and competent operators trained in all standard and emergency operating procedures of these rentals. Likewise, it is expected that maintenance personnel will also perform the required boiler maintenance and parts replacement expected of boilers of this size.

14.1 Please provide the number of trained operators needed to operate the temporary rental boilers, in accordance with Technical Safety BC's requirements.

14.2 Please confirm, or otherwise explain, whether Creative Energy intends to train its existing staff to operate and maintain the temporary rental boilers.

14.2.1 If confirmed, please explain whether Creative Energy will have a sufficient number of staff to operate the Expo Plant and the temporary rental boilers and assist in resolving any issues at the Betty Plant.

14.2.2 If not confirmed, please explain who will be trained to operate the temporary rental boilers.

**15.0 Reference: CONTINGENCY PLAN
Exhibit B-23, Appendix 5-1, pp. 36, 37
Role and Responsibilities**

Page 36 of Appendix 5-1 states:

There will be the need for supervision and coordination of the scope of work for the Temporary Boiler Subproject.

Due to the number of stakeholders and interrelated parties and concurrent activities, the Temporary Boiler Subproject requires a single point of contact.

There is a range of risks to be monitored and mitigated including performance, EH&S, plant reliability, schedule, execution, quality, communications, financial and regulatory issues.

The nomination of a Temporary Boiler Subproject project manager will be required to oversee and report on Temporary Boiler Subproject scope, schedule, quality, safety and costs.

- 15.1 Please explain who will be responsible for the following (company and job title of person responsible):
- i. Supervision and coordination of the scope of work for the Temporary Boiler Subproject;
 - ii. Single point of contact for the Temporary Boiler Subproject; and
 - iii. Temporary Boiler Subproject Project Manager.

Pages 36 and 37 outline the tasks required for each stage of the Contingency Plan which includes:

- i. Front End Engineering and Design
- ii. Detailed Engineering and Procurement
- iii. Boiler pre-op cleaning, hydrotest & conditioning costs Assembly and Construction
- iv. Commissioning and Training

15.2 Please explain who will be responsible for items i) to iv).

**16.0 Reference: CONTINGENCY PLAN
Exhibit B-23, Appendix 5-1, pp. 23, 42
Risk Mitigation**

Page 42 of Appendix 5-1 states:

The objectives of any risk mitigation recommendations included in this report, were weighed against the following to ensure:

- a) **No loss of Revenue** - That reliability of the plant was maintained at its historical levels ~ 99.9% and no unnecessary risks be introduced beyond what the plant has typically accepted
- b) **No additional Costs** – That no unnecessary or additional operating/maintenance costs be imposed on CE or its rate payers, except where required
- c) **No lowering of Standards** – That no undue risk be accepted that would harm the environment, the health or the safety of plant personnel or plant neighbors

16.1 Please confirm, or otherwise explain, that the objective of the risk mitigation is to ensure that

Creative Energy's customers do not experience a loss of service or an interruption to service.

Page 23 of Appendix 5-1 states:

Prerequisite to commencing construction, it will be necessary to conduct a comprehensive risk assessment on all safety and reliability critical equipment, operating systems and operating procedures (standard & emergency) needed to support the plant during a transient period anticipated over the demolition and construction phases of the Master Project.

- 16.2 Please explain when the comprehensive risk assessment on all safety and reliability critical equipment, operating systems and operating procedures (standard & emergency) will be conducted.
- 16.3 Please provide the date by which the comprehensive risk assessment must be completed.
- 16.4 Please explain who will be responsible for conducting the comprehensive risk assessment.

**17.0 Reference: CONTINGENCY PLAN
Exhibit B-23, Appendix 4, p. 5; Appendix B-1, p. 12;
Appendix 5-1, pp. 7-8
Contingency Plan Costs**

- 17.1 Please confirm, or explain otherwise, that all costs associated with the contingency plan, as laid out in Appendices 5 and 5-1 "fall under the costs of the Developer's project."

Page 12 of Appendix 5-1 states:

- Rental Boiler Engineering ~ \$50,000
- Rental Boiler Tie-In's ~ \$250,000 for all tie-ins
- Rental Boiler Shipping ~ \$75,000 delivery per boiler
- Rental Boiler Unloading & Assembly ~ \$50,000 for all boilers
- Rental Boiler C&SU ~ \$25,000
- Rental Boiler Monthly Charges ~ \$250,000 per month
- Rental Boiler Disassembly & Loading ~ \$50,000 for all boilers
- Rental Boiler Shipping and Return ~ \$75,000 return per boiler

- 17.2 Please provide breakdown of all works included in the Rental Boiler Tie In's item.
 - 17.2.1 Please confirm, or otherwise explain, whether the Rental Boiler Tie In's item includes extensions to the flue gas stacks and the weather proof enclosure.
- 17.3 Please provide a breakdown of the total cost of the Contingency Plan for the entire duration of the Proposed Project, including the accuracy of the estimate. Please include the following:
 - i. Rental boiler design and construction:
 - a. Pre-work;
 - b. Engineering;
 - c. Construction;
 - d. Training; and
 - e. Risk Assessment.
 - ii. Rental boiler operation:
 - a. Shipping;
 - b. Installation;
 - c. Commissioning and Start-up; and
 - d. Rental charges (including rental duration considered).

- 17.4 Please discuss whether any aspect of the Contingency Plan could be considered to be a change order requested by Creative Energy or a project delay caused by Creative Energy, as defined in the Amended and Restated Trust and Development Agreement provided in Appendix 2-1. Please provide examples of any such instances and the estimated costs.

Pages 7 and 8 of Appendix 5-1 state:

It would be cost-prohibitive to have the temporary boilers on site for the entire construction period and so one of the key objectives of the **Temporary Boiler Subproject** is to identify all of the preparations that are required to support temporary boilers or other backup steam plant equipment being quickly incorporated and operational in the event they are needed. [Emphasis added]

- 17.5 Please explain what is meant by the statement “[i]t would be cost-prohibitive to have temporary boilers on site for the entire construction period.” In your response, please provide the following:
- i. Definition of “cost-prohibitive” and how this is determined;
 - ii. Total cost at which temporary boilers are deemed to become “cost prohibitive”; and
 - iii. Current estimated total cost for temporary boilers on site for the entire construction period.

D. DESIGN ENGINEERING AND GENERAL CONTRACTOR

- 18.0 Reference: DESIGN ENGINEERING AND GENERAL CONTRACTOR
Exhibit B-23, p. 3; Appendix 6, pp. 1-2;
Design Engineering and General Contractor**

On page 3 of Exhibit B-23, Creative Energy states:

Creative Energy will act in the general capacity as Construction Manager of the Expo Plant and the assets of the Beatty Plant, whereby Creative Energy has oversight of those aspects of the project. The Developer is still responsible for the costs. Creative Energy will hire a qualified and experienced Design Engineering Company as the Engineer(s) of Record, and hire a qualified and experienced General Contractor to conduct the construction activities within Creative Energy’s scope as outlined in Appendix 6.

On pages 1-2 of Appendix 6 to Exhibit B-23, Creative Energy states:

Following CPCN approval, Creative Energy plans to employ the following competitive processes to engage these services and submit the required information to the BCUC for oversight and acceptance:

1. Request for Proposals (RFP) for Design Engineering Services
 - The Design Engineering RFP will require bidders to present their relevant experience and only qualified bidders will be evaluated.
 - Creative Energy will submit the qualifications of the selected Engineering firm to the BCUC for acceptance before commencing work.
2. Two-stage Request for Qualifications - Invitation to Tender (RFQ-ITT) for General Contractor
 - once the design documents have been refined to allow for accurate tendering, a public RFQ package will be issued requesting interested contractors to submit records of experience successfully constructing

similar projects. From the bidders, Creative Energy will create a shortlist of qualified General Contractors to advance to the final round.

- Creative Energy will submit this shortlist to the BCUC for acceptance.
- following BCUC acceptance of parties on the submitted shortlist, an ITT will be issued to those parties accepted by the BCUC. The ITT process will be structured to award the project to whichever firm submits the lowest pricing with a fully compliant tender package.
- Creative Energy proposes to report the name of the selected General Contractor to the BCUC as part of regular reporting on the progress of the project.

- 18.1 Please provide the name of the party responsible for managing the RFP process for Design Engineering Services.
- 18.2 Please provide the name of the party responsible for managing the RFQ process for the Invitation to Tender.
- 18.3 Please provide the name of the party responsible for the selection of the General Contractor.
- 18.4 Please provide the name of the party with which the General Contractor will sign the contract.
- 18.5 Please provide the name of the party responsible for managing the General Contractor.
- 18.6 Please explain Creative Energy's responsibilities as the Construction Manager of the Expo Plant.
- 18.7 Please explain Creative Energy's responsibilities as the Construction Manager of the assets of the Beatty Plant.

E. PROJECT SCHEDULE

**19.0 Reference: PROJECT SCHEDULE
Exhibit B-23, Appendix 5-1, pp. 39-40; Appendix 7-1, pp. 1-3
Project Schedule**

On pages 1 to 3 of Appendix 7-1, Creative Energy provides a detailed preliminary project schedule titled '720 Beatty/701 Expo Schedule – Standard w/ Advance 701 Expo' (Project Schedule).

Line IDs 15 to 25 of the Project Schedule indicate the tasks for "Drawings and Documents (720 Beatty & 701 Expo).

- 19.1 Please confirm, or explain otherwise, that the tasks relate to the drawings and documents for the real-estate development and not for the Beatty and Expo Plants.

Line IDs 29 and 30 are for the 'Design of the Expo Plant' and 'Tender Expo Construction' however the Project Schedule does not include similar tasks for the Beatty Plant.

- 19.2 Please explain why the Project Schedule does not include tasks for the design and tendering of the Beatty Plant.

Line 41 and 83 to 84 of the Project Schedule indicate the tasks required for Plant Shutdown #1 and Plant Shutdown #2 respectively.

- 19.3 Please provide a detailed description of the work required during each shutdown.

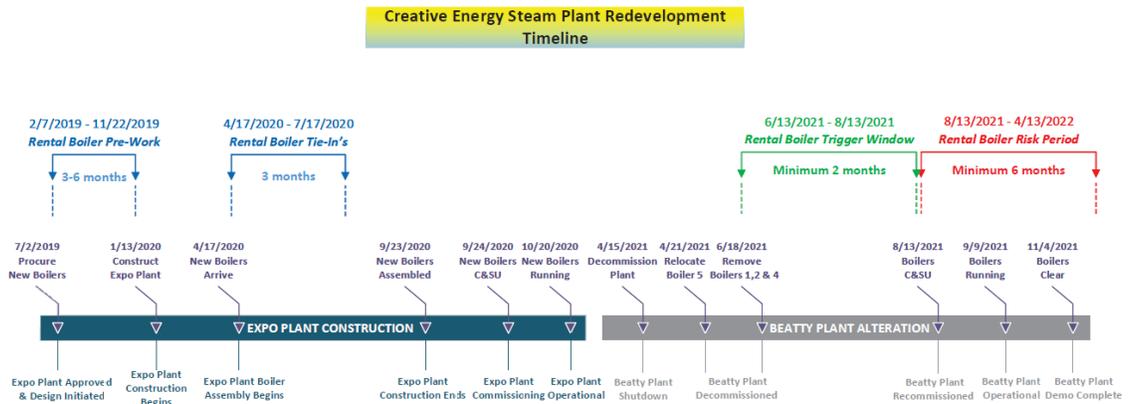
Line IDs 27 to 33 of the Project Schedule show that a total of 410 days is allocated for the 'Stage 1 – Expo Plant & Interconnection'. This includes 40 weeks for the 'Procure Boiler & Feedwater Package' task.

Line IDs 35 to 45 of the Project Schedule show that a total of 305 days is allocated for 'Stage 2 – Existing Plant Alteration'. This includes the Plant & Office Buildings Alteration tasks, the Beatty Plant shutdown and the relocation of the gas, water and electrical services.

19.4 Please discuss the time contingency that Creative Energy has allowed for in the Project Schedule for Stage 1 and Stage 2 tasks.

19.5 Please discuss the impact on the overall schedule, project costs and service to customers if the schedule is significantly delayed, such that it exceeds any contingency time allowed for any task.

Page 39 of Appendix 5-1 provides the Subproject Schedule:



Page 40 of Appendix 5-1 provides the major tasks and their expected duration:

Task	Duration
Rental Boiler Pre-Work	3-6 months
Engineering	
Data Gathering	
Risk Assessment	
Scope of Work	
Boiler Sourcing	
Regulatory Approvals	
Rental Boiler Tie-In's and Services	3 months
Identify Tie-Ins	
Engineer Tin in Points	
Order Materials	
Schedule Tie Ins	
Oversee Installation	
Test & Commission Tie Points	
Rental Boiler Sourcing & Shipping	1 month
Identify Rental Boilers	
Conduct Compliance Inspection	
Negotiate & Sign Contract	
Plan Routing and Transportation	
Arrange Permits, Escorts, Insurance	
Track Transportation of Boilers	
Assembly and Construction	1 month
Select Installation Contractor(s)	
Prepare Site for Delivery	
Arrange for Weather Enclosures	
Set Boilers & Unload	
Assembly Boilers	
Complete Tie-In's	
Install Winterization Package	
Test & Pre-Commission Boilers	
C & SU and Operator Training	1-2 weeks
Commission Boilers	
Test for Compliance & Permits	
Train Operators & Maint. Staff	
Conduct Performance Test	
Dis-Assembly and Return	1-2 weeks
Disassemble Weather Enclosures	
Disassemble Boilers	
Disconnect Tie-Ins	
Prepare for Shipping	
Load & Ship Boilers	

- 19.6 Please provide an update to the Project Schedule to include the following:
- i. Temporary Boiler Subproject schedule including major tasks and duration;
 - ii. Design, tendering and any other necessary tasks for the Beatty Plant;
 - iii. Detailed tasks required during each Plant Shutdown;

- iv. Schedule for relocating services (electrical, gas and water); and
- v. Schedule for providing utility services to the temporary rental boilers.

F. OTHER

**20.0 Reference: OTHER
Exhibit B-23, Appendix 1-1, p. 1
Revised Summary of Approvals Sought**

On page 1 of Appendix 1-1 to Exhibit B-23, Creative Energy provides a revised “Summary of Approvals Sought” blacklined to page 7 of the Application and includes the following revision:

Creative Energy proposes that the Commission include a condition on its CPCN approval that Creative Energy's rate base shall increase by \$15 million as a result of the Proposed Project, subject to adjustments approved by the Commission for inclusion in rate base in connection with (i) any change orders requested by Creative Energy, or (ii) project delays caused by Creative Energy, ~~and to any secondary payment as noted below~~ subject to prudence review.

20.1 Please discuss the expected timing and regulatory process contemplated by Creative Energy with respect to requesting additional costs for inclusion in rate base “subject to prudence review.”

20.1.1 When would the prudence review take place (e.g. before or after the cost has been incurred)?

20.1.2 Would Creative Energy prepare a separate filing for each adjustment, or would the request for approval be included as part of the Creative Energy’s revenue requirements applications or some other filing?

20.1.3 Should the request for additional costs for inclusion in rate base be subject to a public proceeding? Please explain why or why not.

Page 1 of Appendix 1-1 to Exhibit B-23 maintains that the estimated total capital cost of the Proposed Project is \$53.1 million. However, on pages 3 to 4 of the Cover Letter to Exhibit B-23, Creative Energy provides a number of major updates to the overall project and Appendices 2 through 9 explain what Creative Energy and the applicable counterparties have done to address each of the Panel's eight requirements, respectively, per Order G-38-19.

20.2 Please provide a revised estimated total capital cost of the Proposed Project which takes into consideration the major updates to the overall project and any costs associated with what Creative Energy and the applicable counterparties have done to address each of the Panel's eight requirements, per Order G-38-19.

**21.0 Reference: OTHER
Exhibit B-23, Appendix 3
Developer’s Indemnities**

The Amended and Restated Trust and Development Agreement (TDA) is provided in Appendix 2-1 of Exhibit B-23.

Creative Energy states on page 1 of Appendix 3:

Creative Energy would first like to clarify that pursuant to Section 9.1 of the TDA considered by the BCUC Panel... both the Developer and Westbank Holdings Ltd.

(Westbank Holdings) jointly and severally indemnify the utility from and against any and all claims and losses at any time suffered or incurred by the utility in connection with the construction and development of the project. Westbank Holdings is the parent company of the Developer. [*Emphasis Added*]

A copy of Section 9.1 of the TDA (referenced as the “Developer’s Indemnities”) is further provided on page 2 of Appendix 3.

21.1 Please explain in detail the extent, if at all, to which the Developer and Westbank Holdings’ “joint and several” indemnities of the utility eliminate the following risks to the project previously identified by Creative Energy:

(i). Risk #17 (“Funding issues – lack of funding or delay in payments”); and

(ii). Risk #25 (“Counterparty risk – i.e. WB insolvent”)²

21.1.1 Please explain how, in practice, the indemnities would protect Creative Energy from the two risks noted above (e.g. what are the steps?).

21.2 Please provide evidence of the financing (or other readily available security) that the Developer and Westbank Holdings have in place to support their respective indemnities to Creative Energy in connection with the construction and development of the project.

² Exhibit B-5, BCUC IR 29.1; Attachment 29.1