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June 12, 2019

VIA ELECTRONIC MAIL

British Columbia Utilities Commission
6th Floor, 900 Howe Street
Vancouver, B.C.
V6Z 2N3

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**Attention: Patrick Wruck, Commission Secretary and
Manager, Regulatory Support**

Dear Sirs/Mesdames:

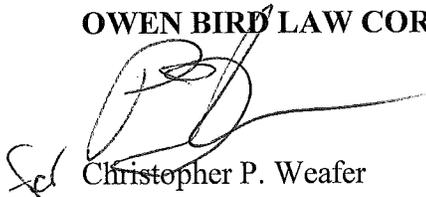
**Re: Creative Energy Vancouver Platforms Inc. ("Creative Energy") ~ Application for a
Certificate of Public Convenience and Necessity for the Beatty-Expo Plants and
Reorganization ~ Project No. 1598962**

We are counsel to the Commercial Energy Consumers Association of British Columbia (the "CEC"). Attached please find the CEC's Information Requests to Creative Energy on specified scope with respect to the above-noted matter.

If you have any questions regarding the foregoing, please do not hesitate to contact the undersigned.

Yours truly,

OWEN BIRD LAW CORPORATION


Christopher P. Weafer

CPW/jj
cc: CEC
cc: Creative Energy
cc: Registered Interveners

**COMMERCIAL ENERGY CONSUMERS ASSOCIATION
OF BRITISH COLUMBIA (“CEC”)**

**INFORMATION REQUEST
TO CREATIVE ENERGY VANCOUVER PLATFORMS INC. ON SPECIFIED SCOPE**

**Creative Energy Vancouver Platforms Inc. (“Creative Energy”) ~ Application for a
Certificate of Public Convenience and Necessity for the Beatty-Expo Plants and
Reorganization
Project No. 1598962**

June 12, 2019

1. Reference: Exhibit B-23 page 3

2. Removal of 701 Expo from the rezoning application

The City of Vancouver has confirmed that 701 Expo Boulevard is already zoned (under BCPED) which allows the currently proposed use (retail). Current zoning will stay in place for 701 Expo and the construction at that site will likely start prior to construction at 720 Beatty Street due to the location of the diesel fuel tanks and interconnection lines within 701 Expo. The property line between the two sites will remain with a two-hour rated wall separating the two parcels and select areas for access between the two sites. The property line remaining also drives some changes to meet City of Vancouver Engineering and Building Code requirements, such as discrete water and sewer services for each parcel.

This change in zoning strategy allows the parkade portion on 701 Expo to be constructed earlier in the project, which in turn simplifies the construction sequencing significantly, reducing the project risk. The major risk reduction factors are enhanced exiting from BC Place during construction and reduced shutdowns of the Beatty Plant during the project.

- 1.1 Please provide the meaning of a ‘two-hour rated wall’ and the importance of the wall separating the two sites.
- 1.2 Please identify all the changes required to meet City of Vancouver Engineering and Building Code requirements and the cost of the expected changes.
- 1.3 Please identify to which party the costs from the City of Vancouver changes will accrue.
- 1.4 Please provide further details of the change in construction sequencing and quantify the reduction in project risk from the change in construction sequencing.
- 1.5 Please identify to what party the project risk accrues.

- 1.6 Are there cost changes as a result of the change in construction sequencing?
 - 6.1.1 If yes, please quantify.
 - 6.1.2 If yes, to whom do the cost benefits accrue? Please explain.
- 1.7 What changes would be necessary to the terms of the agreement for ratepayers to receive benefits from the identified changes? Please explain.

2. Reference: Exhibit B-23, page 3

3. Gas Main Relocation

Creative Energy has worked with FortisBC Energy Inc. (FortisBC) to plan for the natural gas servicing for both the Expo and Beatty Plants. With construction at 701 Expo being advanced in the schedule, this site will be constructed up to grade roughly at the same time that the Expo Plant is being constructed, allowing relocation of the natural gas main entry to the very east corner of the 701 Expo property. FortisBC intends to construct a new gas main along Expo Boulevard to serve both the Expo Plant and the Beatty Plant, and interconnect with the current gas main at Beatty and Georgia once the viaducts are removed.

This change allows new gas service for the Beatty Plant to be installed in advance of the first shutdown, which significantly alleviates schedule risk during the shutdown.

- 2.1 Is FortisBC Energy Inc. (“**FortisBC**”) likely incurring costs as a result of the Creative Energy project that it would not otherwise incur? Please explain.
 - 2.1.1 If yes, please provide an estimated quantification of the costs that may be incurred by FortisBC.
- 2.2 Will FortisBC require approval from the Commission for the construction of a new gas main? Please explain.
 - 2.2.1 If yes, when does Creative Energy expect that FortisBC will have approval from the Commission for the new gas main?

3. Reference: Exhibit B-23, pages 3-5

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.

The major updates to the overall project are as follows:

1. Rezoning Application

The City of Vancouver accepted the Developer's rezoning application on December 21, 2018. A community Open House for the rezoning was held on March 11, 2019 with favourable feedback. The materials presented at the Open House are available on the City of Vancouver rezoning website at <https://rezoning.vancouver.ca/applications/720beatty2/index.htm>. The project was also presented to the City of Vancouver Urban Design Panel on April 17, 2019 and gained unanimous support.

2. Removal of 701 Expo from the rezoning application

The City of Vancouver has confirmed that 701 Expo Boulevard is already zoned (under BCPED) which allows the currently proposed use (retail). Current zoning will stay in place for 701 Expo and the construction at that site will likely start prior to construction at 720 Beatty Street due to the location of the diesel fuel tanks and interconnection lines within 701 Expo. The property line between the two sites will remain with a two-hour rated wall separating the two parcels and select areas for access between the two sites. The property line remaining also drives some changes to meet City of Vancouver Engineering and Building Code requirements, such as discrete water and sewer services for each parcel.

This change in zoning strategy allows the parkade portion on 701 Expo to be constructed earlier in the project, which in turn simplifies the construction sequencing significantly, reducing the project risk. The major risk reduction factors are enhanced exiting from BC Place during construction and reduced shutdowns of the Beatty Plant during the project.

3. Gas Main Relocation

Creative Energy has worked with FortisBC Energy Inc. (FortisBC) to plan for the natural gas servicing for both the Expo and Beatty Plants. With construction at 701 Expo being advanced in the schedule, this site will be constructed up to grade roughly at the same time that the Expo Plant is being constructed, allowing relocation of the natural gas main entry to the very east corner of the 701 Expo property. FortisBC intends to construct a new gas main along Expo Boulevard to serve both the Expo Plant and the Beatty Plant, and interconnect with the current gas main at Beatty and Georgia once the viaducts are removed.

This change allows new gas service for the Beatty Plant to be installed in advance of the first shutdown, which significantly alleviates schedule risk during the shutdown.

4. Advanced Core at 720 Beatty

Following the schedule updates in light of the advance of 701 Expo and gas service by FortisBC, ICON has recommended advancing construction of the elevator core for 720 Beatty, including the boiler flues, ahead of the construction of the rest of the development. The implication is that from March 2022 to September 2022 (during Beatty Plant shutdown #2) the entire core will be built and the boiler flues tied in. Once this tie-in is complete, there are no further requirements for shutdown of the boiler plant at Beatty, and the risk of service interruption has been reduced.

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

5. Revised project schedule

With the updated plan to advance construction of the below-grade portions of 701 Expo, gas servicing and construction of the Beatty core, the project schedule has been revamped significantly. A full project schedule is included in Appendix 7 of this filing. The tables below provides a summary of the project milestones. A significant change is that the construction now only requires two shutdowns of the Beatty Plant rather than three as outlined in the Application. This has a corresponding service interruption risk reduction.

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

- 3.1 Would Creative Energy agree that the project schedule in Appendix 7 is optimistic, particularly in light of the fact that it, and not an experienced general contractor, is acting as Construction Manager? Please explain.
- 3.2 Does Creative Energy have a plan or strategy to mitigate against the risks arising from the fact that it is not specialized in acting as a Construction Manager?
- 3.3 If Creative Energy will be directly managing contracts with any major sub-trades or suppliers in its role as Construction Manager, does it plan to require security performance or construction bonds from them? Please explain.
 - 3.3.1 If not, please explain why not.
- 3.4 If there is a failure on the part of Creative Energy as Construction Manager to maintain the project schedule, would costs flowing from that be added to the \$15 million that Creative Energy must contribute to the project cost?
 - 3.4.1 If so, would Creative Energy seek to recover additional costs from ratepayers? Please explain.

- 3.5 Creative Energy notes the risk reduction from reducing the number of shutdowns. Is the reduction in shutdowns the result of the change in construction sequencing noted above, or are there additional sources of risk reductions? Please explain.
- 3.6 To what extent can contingencies can be reduced as a result of the risk reductions? Please explain and quantify.
- 3.6.1 How does the risk reduction benefit ratepayers, if at all?
- 3.7 Please quantify all the benefits of the reduction in schedule risk to the extent possible.

I. **Changes and Explanations related to the Trust Agreement:**

4. **Reference: Exhibit B-23, Appendix 1-1 page 1 and Appendix 1-2 PDF page 13/393**

Given that Creative Energy's portion of the total project cost (estimated at \$53.1 million) is limited to \$15 million, subject only to additional costs for change orders requested by Creative Energy or project delays caused by Creative Energy (and the Developer bears all other cost risks), 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. Creative Energy will, in a future application, request approval of rates to enable Creative Energy to recover its costs for the Proposed Project.

2. The Certificate granted pursuant to Directive 1 is subject to the following conditions: ~~that~~

i. Creative Energy's rate base shall increase by only \$15 million as a result of the Propose Project, subject only to adjustments approved by the Commission for inclusion in rate base in connection with (i) any change orders requested by Creative Energy, and (ii) any project delays caused by Creative Energy, and (iii) any Secondary Contribution Payment by Creative Energy subject to prudence review.

- 4.1 When does Creative Energy expect to request approval of rates for cost recovery?
- 4.2 At what point will the Commission be informed of (i) any change orders requested by Creative Energy?
- 4.3 At what point will the Commission be informed of (ii) project delays caused by Creative Energy?

4.4 Why did Creative Energy insert the phrase ‘subject to prudence review’? Please explain.

4.5 As noted above, the Certificate is subject ‘only to adjustments approved by the Commission for inclusion...’ Please confirm that the Commission will have the opportunity to ‘approve’ the adjustments and the costs in advance and the adjustments will not only be subject to an after-the-fact prudence review.

4.5.1 If not confirmed, please explain why not.

4.5.2 If confirmed, please comment on the process that will enable the Commission to approve the adjustments.

5. Reference: Exhibit B-23, Appendix 1-1, page 2

~~3-2.~~ Pursuant to sections 56 and 60 of the *UCA*, approval to establish a regulatory deferral account to record the undepreciated net book value of the Creative Energy assets that are retired as part of the Proposed Project, excluding land. This value is currently estimated to be approximately \$2.96 million. When the Proposed Project is complete and the actual undepreciated net book value of the retired assets excluding land is determined, Creative Energy will apply to the Commission for approval of a rate treatment to recover such costs.

5.1 Please provide the basis for the change in undepreciated net book value from \$2.9 million to \$2.6 million and identify where this is demonstrated in the application.

6. Reference: Exhibit B-23, Appendix 1-2, PDF page 13 of 393

Q. On [DATE], the LGIC issued Order In Council (OIC) [#] providing consent for the Amalgamation pursuant to section 53(1)(a) of the Act, subject to the conditions that (i) the Commission approves the Application, and (ii) the steps for reorganization, as set out in the Application, must occur in immediate succession and result in the final corporate structure set out in Appendix M to the Application;

6.1 Please confirm that the LGIC has not issued any Order in Council providing consent for the Amalgamation.

6.2 When does Creative Energy expect the LGIC to issue such an Order?

7. Reference: Exhibit B-23, Appendix 1-2 PDF page 13 of 393

7. [Directive respecting reporting requirements]

7.1 Please provide the ‘reporting requirements’ that Creative Energy expects are appropriate for the project and explain why.

- i. Elimination of clauses regarding the potential secondary capital expenditure related to increases in capacity;**

8. Reference: Exhibit B-23, Appendix 2

Appendix 2

Commission Directive 3.1.i. – Elimination of Potential Secondary Capital Expenditure

This directive provides that BCUC approval of the requested CPCN will require approval by the Panel of a change to the Trust and Development Agreement (TDA) to eliminate clauses regarding the potential secondary capital expenditure related to future increases in steam generating capacity at the Beatty Plant.

Creative Energy confirms that such clauses have been removed from the TDA, and the potential secondary capital expenditure has also been removed from the revised approvals sought and revised draft final Order as provided in Appendices 1-1 and 1-2. A copy of the Amended and Restated TDA is provided in Appendix 2-1. A black lined version is provided in Appendix 2-2 showing the changes relative to the previous agreement on the record as Exhibit B-1-2.

Please refer to pages 6 and 36 of the blacklined version of the Amended and Restated TDA where the provisions related to the potential secondary capital expenditure (previously defined in the TDA as the “Additional CEV Amount”) have been removed.

8.1 Please confirm that there are no other references to the secondary capital expenditure in any other agreements or other binding documents that could impact ratepayers.

8.1.1 If not confirmed, please provide.

- ii. Provision of additional financial security such as performance or construction bond for an appropriate amount and duration;**

9. **Reference: Exhibit B-23, Appendix 3 PDF page 163/393 and page 167/393**

Panel determination

Although the mechanism of the comfort letter to deal with concerns regarding the strength of the indemnification is helpful, the Panel finds it still potentially leaves Creative Energy with considerable risk it would not have operating as a utility or developing its own site. In this case the Panel is of the view that a comfort letter provided by the Developer from time to time is not adequate to deal with the potential risk to Creative Energy and therefore not in the public interest. **The Panel finds that a Performance or Construction Bond would provide the appropriate additional financial assurance.**¹

Additionally, the TDA parties have agreed to the Panel's condition as reference above, and have added into the Amended and Restated TDA, provided in Appendix 2-1, the requirement for additional financial security to be provided by the Developer.

2) Amount of Additional Financial Security

The amount of the financial security has been determined in consideration of the total value of work to be undertaken by the Developer at the Beatty Plant prior to the Stabilization Date.

Prior to the Stabilization Date, the primary risk that Creative Energy faces as a result of holding legal title is related to the Developer's construction financing and costs. These risks are already mitigated pursuant to the financing restrictions and insurance requirements of the agreement as discussed above. Accordingly, the new additional financial security is designed to cover risks of claims by for example subcontractors and suppliers for unpaid materials and work during the time period as discussed above.

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 (this figure is rounded up to \$20 million in Section 9.4(a) of the Amended and Restated TDA). This portion of the project will occur over a period of approximately 21 months, and the outstanding accounts payable at any given point in time would not exceed \$10 million.

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. Known as a 50% performance bond, this is the most common form of financial security for construction projects.

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.

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. These are provided in Appendices 3-2 and 3-3, respectively.

Please refer to Section 9.4 of the Amended and Restated TDA for the provisions related to the additional security. A copy of the Amended and Restated TDA is provided in Appendix 2-1 of this filing. Appendix 2-2 provides a black line version showing the changes relative to the TDA reviewed by the BCUC Panel and on the record as Exhibit B-1-2.

- 9.1 Why does Creative Energy exclude demolition, civil work and building modifications for the total value of the work on the Beatty Plant?
- 9.2 Please provide the total expected value of the demolition, civil work and building modifications and the applicable contingencies.
- 9.3 Can Creative Energy guarantee that the accounts receivable will never exceed \$10 million? Please explain.
- 9.4 Please confirm that litigation costs could drive the liabilities considerably higher than the value of accounts receivable.

- 9.5 How will the ratepayer be protected from possible litigation costs? Please explain.
- 9.6 Can Creative Energy guarantee that the maximum liability, including litigation or other costs will never exceed \$10 million? Please explain.
- 9.7 Please provide evidence or identify where it is included in the application or other materials that the accounts payable at any given point in time would not exceed \$10 million.
- 9.8 Please provide an overview of other forms of financial security that might be available to Creative Energy.
- 9.9 What is the difference between a Construction Bond and a Performance Bond?
- 9.10 Please provide further details for the Performance Bond. Over what period of time will the bond be in effect? Is it a multi-year renewable bond? Does it cover labour and materials? Please provide an example of the bond being obtained.
- 9.10.1 Does Creative Energy expect to have to extend the period? Please explain what circumstances would cause such an event.
- 9.11 Please confirm that a Performance Bond does not guarantee that there will not be significant cost overruns or substantial delays which could potentially impact ratepayers.
- 9.12 Are there Performance Bonds with a higher or lower % available than 50%? Please discuss and provide the expected costs of such bonds.
- 9.12.1 If yes, please explain why Creative Energy selected 50% and did not seek a higher % Performance Bond from the Developer.
- 9.13 If the Performance bond covers \$5 million of \$10 million in accounts payable, will Creative Energy shareholders take the risk for the extra \$5 million, plus any litigation costs, or will those risks accrue to the ratepayer? Please explain.
- 9.14 When does Creative Energy expect to have the Performance Bond obtained? Please explain why Creative Energy selected this timing.

iii. An explanation in response to the Panel's concerns with respect to whether the 80.4 percent baseline efficiency as claimed by Creative Energy is accurate in light of the fact that 25 percent of the fuel savings from the Clear Sky economizer accrue to the Company. In the event this cannot be adequately explained, Creative Energy is required to outline what it is prepared to do to ensure the predicted fuel savings are achieved.

10. Reference: Exhibit B-23, Appendix 4, PDF page 179/393

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.

10.1 Has Creative Energy conducted a detailed carbon reduction and lifecycle analysis with respect to potential new economizers at the Beatty Plant?

10.1.1 If yes, please provide.

10.1.2 If no, please explain why not.

10.1.3 If no, does it intend to do so in the future? Please explain and provide expected time frames for the analysis.

11. Reference: Exhibit B-23, Appendix 4, PDF page 177/393

For the purpose of comparing the Proposed Project to the Alternative (an in-situ replacement of the end-of-life components of the Beatty Street plant), the Application used a baseline against which to compare both projects. 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.⁶ This assumption provides for a common and reasonable baseline as at 2023 against which to compare the Proposed Project to the Alternative, as follows:

- The Clear Sky economizer is located on the roof of the building housing the Creative Energy plant and office space. The plant, building and office space are all in need of upgrade or replacement as described in the Application⁷.
- 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. The baseline for the Alternative also 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. While it is confirmed that the life of the Clear Sky unit could be extended from a technical point of view, there would be additional cost to maintain it and it is not known at this time whether Creative Energy could keep the economizer and still rely on Clear Sky's commitment in the expiring agreement to remove the unit at Clear Sky's cost. If the baseline for the Alternative was to assume that the economizer remains in place indefinitely, this would require different baselines for the Proposed Project vs. the Alternative, and the additional cost of maintaining the economizer and the cost of its eventual removal would have to be included in the cost of the Alternative increasing its cost and present value cost relative to the estimates in section 14 of the Application.
- Given the need to replace the oldest boilers at Beatty and address the seismic risk associated with the sub-standard building, it would not be reasonable to invest in a new economizer until after those matters have been addressed. The baseline used in the Application to compare the Proposed Project to the Alternative does not include investment in a new economizer (estimated at \$1.4 million⁹) because both projects include major upgrades or replacement of the building structure.
- A new economizer is included in the costs and benefits estimated for both the Proposed Project and the Alternative.

For the above reasons, Creative Energy considers that it is reasonable to assume that the economizer unit has been removed by 2023 at no cost to Creative Energy for the purpose of using a common baseline as at 2023 for comparing the costs and benefits of the Proposed Project to those of the Alternative.

- 11.1 Please provide the full name for Clear Sky and a link to the corporate website if available.
- 11.2 For how long has Creative Energy had a business relationship with Clear Sky?
- 11.3 Please confirm that Clear Sky is still in operation.
- 11.4 For how long could the life of the Clear Sky unit be extended? Please provide the minimum and maximum terms.
- 11.5 What is the additional cost that would be required to maintain the economizer, and for how long would this be required? Please explain to whom these costs would accrue, Clear Sky or Creative Energy?
- 11.6 Please provide the terms that Clear Sky would require in order to extend their business beyond 2023?
- 11.7 Please confirm that in the absence of the proposed Project, Creative Energy could either purchase a new economizer, extend the relationship, or enter into a new agreement with either Clear Sky or another provider.

- 11.8 How many alternatives to the Clear Sky option, such as purchasing a new economizer, has Creative Energy investigated independently of the proposed Project?
- 11.9 Please calculate the NPV of purchasing a new economizer independently of the proposed Project.
- 11.10 Please calculate the NPV of extending the term of the Clear Sky agreement independently of the proposed Project assuming no project is undertaken for the next five, ten, and twenty years, and provide the ratepayer impact.
- 11.11 Please calculate the NPV of purchasing a new economizer independently of the proposed Project assuming no project is undertaken for the next five years and provide the ratepayer impact.
- 11.12 Please calculate the NPV of extending the term of the Clear Sky agreement independently of any project, assuming in situ replacement of boilers, and provide the ratepayer impact.
- 11.13 Please calculate the NPV of purchasing a new economizer independently of any project, assuming in situ replacement of boilers, and provide the ratepayer impact.

II. Other Requirements:

- i. **Development of a comprehensive Contingency Plan, which addresses identified issues;**

Timing Considerations

12. Reference: Exhibit B-23, Appendix 5-1, p. 7-8 and page 24 and page 39

CREATIVE ENERGY has engaged TES Group Inc., to develop a contingency plan outlining measures for the provision of temporary steam boilers to ensure adequate steam generating capacity is available. 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.

The potential for this type of system failure, or for delays and other challenges that impact the schedule necessitates a plan for the provision of temporary steam boilers to ensure adequate generating capacity. 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.

6.3 Nationwide Boiler Estimate

Appendix "C" Nationwide Boiler Cost Estimate (USD)

(Note: This will provide a sense for the cost of renting temporary boilers, but it does not represent a competitive costing for the equipment and peripherals needed for the project)

- 12.1 Please confirm whether Creative Energy intends to install the temporary boilers on site:
- (i) before the first planned shutdown of the Beatty Plant, even if no problem has by that point arisen;
 - (ii) before the first planned re-start of the Beatty Plant, even if no problem has by that point arisen;
 - (iii) before each planned re-start of the Beatty Plant, even if no problem has by that point arisen; or
 - (iv) only if there is a problem or delay that actually arises with re-starting the Beatty Plant:
 - a. after the first planned shut-down;
 - b. after the first or later planned shutdown; and/or
 - (v) also or instead in other circumstances.
- 12.2 Please confirm, with reference to the options set out in items 12.1 (i) – 12.1.(v), when Creative Energy intends to:
- 12.2.1 **source** the temporary boilers;
 - 12.2.2 **order** the temporary boilers; and
 - 12.2.3 **ship** the temporary boilers to the site.
- 12.3 Please quantify the cost of having rental boilers on site for the entire construction period.
- 12.4 Other than costs, please discuss any other factors that were taken into account in determining whether it made sense to have rental boilers on site for the duration of the construction period.
- 12.5 Did TES consider the costs associated with having the rental boilers on site for a portion of the construction period (such as the period around the first re-start of the Beatty Plant, or the period around each re-start of the Beatty Plant)? Please explain.
- 12.6 Please confirm, or otherwise explain, that the boilers described in the Nationwide Boiler Cost Estimate contain minimum rental periods of six months. Is this a typical condition

placed on temporary boiler rentals? Please explain and if not, explain why the minimum is included.

13. Reference: Exhibit B-23, Appendix 5-1, pp. 14

Take-Aways - The principal observations collected from the plant visit and site walkdown were as follows:

- A better assessment of the current plant operation, steam plant equipment condition and configuration,
- A viewing of the property boundaries, plant layout, road access and available space on site and nearby for the placing of temporary rental boilers,
- A better assessment of the current plant operation, steam plant equipment condition and configuration,
- A viewing of the property boundaries, plant layout, road access and available space on site and nearby for the placing of temporary rental boilers,
- A better understanding of the project and risk impacts to be considered, an appreciation for the constraints faced by an urban steam plant like CE's Beatty Steam Plant.
- Confirmation that the need for temporary or back up steam production should be no longer than six months (one winter).

13.1 Please explain how this six-month period was determined.

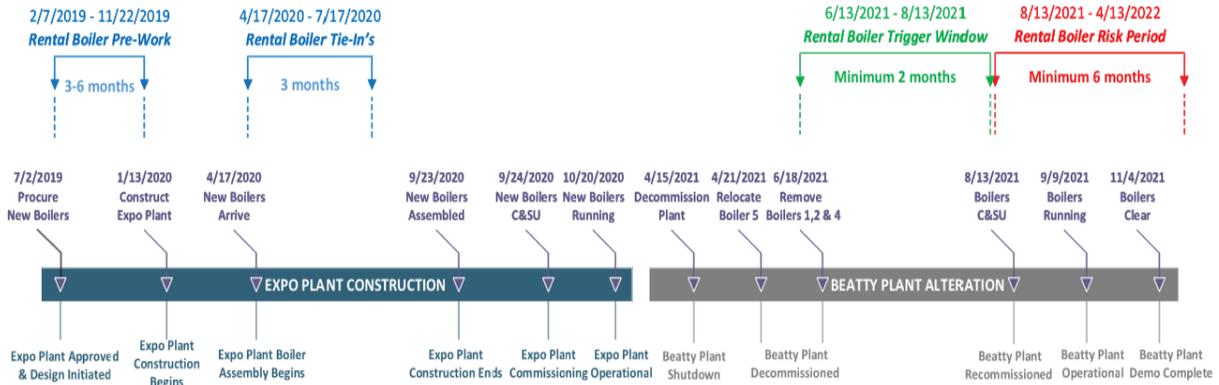
13.2 Does the reference to "one winter" indicate that the contingency plan would not be in place for a second shut-down of the Beatty Plant? Please explain.

14. Reference: Exhibit B-23, Appendix 5-1, pp. 10-11, 39

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

**Creative Energy Steam Plant Redevelopment
Timeline**



14.1 Please confirm, otherwise explain, that TES has estimated that it will take two months for rental boiler sourcing, shipping, assembly and construction.

14.2 Please explain how supply would be maintained during the period required to complete any of the above steps if rental boilers are not already installed at the site prior to a problem arising.

15. Reference: Exhibit B-23, Appendix 5-1, p. 10

Due to the physical size and shipping costs associated with rental boilers, multiple smaller trailer mounted rental boilers are preferred over fewer but larger and heavier rental boiler arrangements. 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.



The boiler dimensions are controlled to fit highway transportation shipping limits, however depending on the location of the rental boiler supplier, these units may be required to traverse multiple jurisdictions (i.e. countries, states, cities), each of which may have unique permitting and/or routing requirements and restrictions. A complete boiler package will involve multiple trailers – one for each boiler and a second truck for boiler components.

- 15.1 Does TES’s estimated timing for sourcing and shipping rental boilers take into account potential delays? Please explain with regard to the following:
- (i) related to importation, arising from sourcing the temporary boilers from the United States?
 - (ii) related to permitting and/or routing requirements and restrictions, depending on where the temporary boilers are sourced from?

Level of Supply Required

16. Reference: Exhibit B-23, Appendix 5-1, p. 6

Once the Expo Plant is commissioned and operating, it will be possible to temporarily shut down the Beatty Plant during the summer and shoulder seasons when the heating demand is low – this approach permits renovation without interrupting service to customers. The renovation scope of work includes demolishing the oldest boilers and the existing office space as part of the project. The renovated Beatty Plant will be smaller than the existing plant and will have space and ancillary equipment to accommodate some expanded generating capacity in the future.

- 16.1 Please provide the peak heating demand during each month of the relevant summer and shoulder seasons (April through October).
- 16.2 Please confirm, otherwise explain, that there is a risk that there could be a failure of one of the boilers at the Expo Plant during the shoulder/summer season while the Beatty Plant is offline.
- 16.2.1 Please explain whether or not the capacity of the remaining boiler (200,000 lbs/hr) would be sufficient to meet customer demand during the shoulder/summer season.

17. Reference: Exhibit B-23, Appendix 5-1, p. 9 and p. 20

- **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

3.2.2 New Expo Steam Plant

In parallel with the upgrades and reconfiguration of the Beatty Steam Plant, a new district heating plant addition is planned for next door, within BC Place Stadium - this new plant is to be called the "Expo Steam Plant".

The new Expo Steam Plant, as proposed, will be located within BC Place Stadium and will receive two (2) new natural gas fired package boilers, estimated to be 200,000 pph in capacity.

The new plant would be capable of supplying steam to half of CREATIVE ENERGY's customer base on the coldest day of the year. Ultimately, both plants when combined and recommissioned, will be sized to functionally generate 740,000 pph with future potential to expand to 1,000,000 pph of steam production.

- 17.1 Please provide the full load steam requirements through the winter period.

What risks are being addressed?

18. Reference: Exhibit B-23, Appendix 5-1, p. 7 and page 24

The most significant risk of an interruption in steam production during the Master Project relates to potential delays in the demolition and re-construction of the Beatty Steam Plant, however; any time these types of changes are introduced into an existing steam plant operation there is cause for concern because operating systems can become taxed or controls can induce an upset condition when new boilers are brought on. The result is that system components that had previously appeared to be operating normally can sometimes falter or fail when the changes are introduced. The potential for this type of system failure, or for delays and other challenges in the Redevelopment Project schedule necessitates the creation of a contingency plan for the provision of steam from temporary boilers, hereinafter referred to as the **Temporary Boiler Subproject**.

The securing of a standby boiler(s) and/or additional steam plant equipment for these purposes is just one aspect of the overall Contingency Plan. The primary risk in this scenario relates to delays in the demolition and re-construction of the Beatty Steam Plant, however; any time these types of changes are introduced into an existing steam plant operation there is cause for concern because operating systems can become taxed or controls can induce an upset condition when new boilers are brought on. The result is that system components that had previously appeared to be operating normally can sometimes falter or fail when the changes are introduced.

18.1 Please confirm that while delays associated with the demolition and re-construction of the Beatty Steam Plant are described as the most significant risk of interruption in steam production, there are additional risks that may interrupt steam production during the Master Project.

18.1.1 If confirmed, please discuss these additional risks.

18.1.1.1 Please explain whether these additional risks were taken into account in the preparation of the TES contingency report.

18.1.2 If not confirmed, please explain why not.

18.2 Are the shut-down and re-start of the Beatty Plant the “types of changes” that could tax the operating system or induce an upset condition? Please explain with respect to the following:

- (i) In the Expo Plant; or
- (ii) otherwise beyond the Beatty Plant?

18.2.1 If so, what impact could that have? For example, would the potential stress on the operating systems or controls of the Expo Plant increase the risk of a system or boiler failure at the Expo Plant? Please explain.

19. Reference: Exhibit B-23, Appendix 5-1, pp. 11

The type of risks on a Master and Subproject of this nature can be grouped into the following categories:

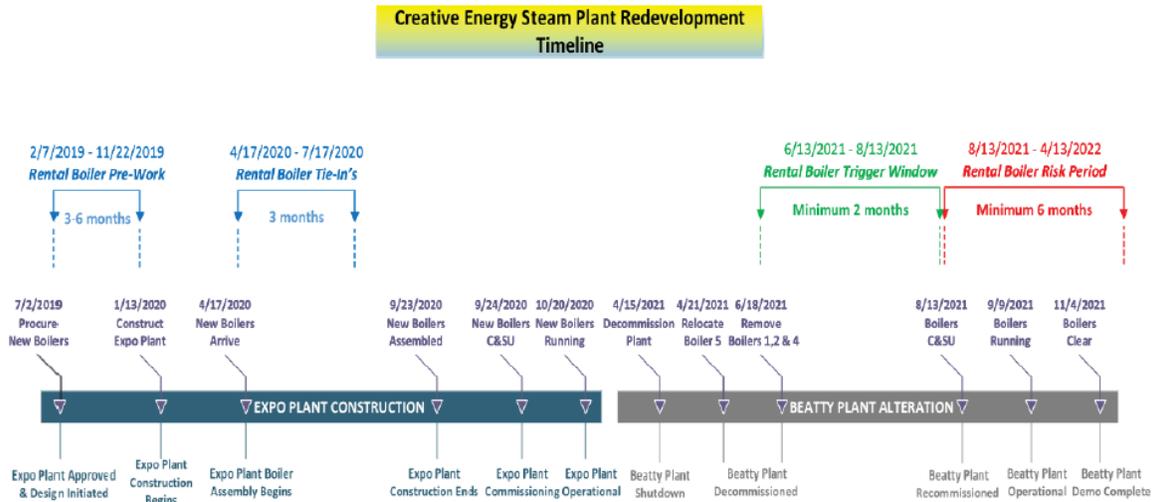
- E. Scheduled Events – The timing of the work is an extremely important part of the risk matrix. One of the simplest ways to avoid an interruption in an existing plant’s operation or the unexpected delay in the startup of a new plant is to allow time between critical activities to ensure that the “bugs are worked out” of one critical event before the next one is introduced. Possible examples are - to have the new boilers fully commissioned/tested and operational for a period of time before the old boilers are decommissioned.
- F. External Events – Single or multiple external and distinct events that could affect the typically safe, clean and reliable operation of the heating plant during the various phases of a major project. Possible examples are - the interruption or curtailment of critical steam plant inputs or services like fuel, water or power.
- G. Internal Events - New or changing conditions during construction/demolition phases of the project that produce an unexpected situation that the steam plant personnel have not previously experienced or prepared for. Possible examples are an unexpected operating or maintenance problem with the new Expo boilers after the Beatty boilers are decommissioned.
- H. Transient Events – These may be situations that were never anticipated (known – unknowns) in a risk matrix and may be a combination of external and internal events. Possible examples are nuisance boiler trips due to civil work such as excavation, piling that may affect sensitive plant instrumentation.

- 19.1 Please confirm, otherwise explain, that a period of approximately five months is expected between the Expo Plant being in operation and the first shut-down of the Beatty Plant.
- 19.2 Please comment on the sufficiency of this time with regard to working out ‘bugs’ with respect to the Expo Plant and provide context from examples.
- 19.3 How will the time schedule be impacted if there is schedule slippage and the Expo Plant is not completed on schedule?
- 19.4 Please explain how the contingency plan addresses the potential for “unexpected operating or maintenance problems with the new Expo boilers after the Beatty boilers are decommissioned”.

20. Reference: Exhibit B-23, Appendix 5-1, p. 39

6.4 Subproject Schedule

The Temporary Boiler Subproject is expected to take 8 to 11 months, from Project Initiation to Final Commissioning and Start-Up of Boilers. Major tasks and their expected duration can be found in the timeline below and in the table on the next page:



20.1 Please confirm, otherwise explain, that the schedule for the Temporary Boiler Subproject, developed in TES's contingency report addresses obtaining temporary boilers in response to delays associated with the first re-start of the Beatty Steam Plant, as opposed to supply issues arising from boiler failures occurring at other times, or associated with re-starting after the second shut down of the Beatty Plant.

21. Reference: Exhibit B-23, Appendix 5-1, pp. 14

During the walkdown, the following items were observed and have been included in this report for consideration, including:

- Plant personnel met on the tour were very professional understood their equipment, could explain their processes, understood their customers' needs and the management of demand through means like load shedding. The staff also exhibited an acute awareness of their urban operating environment.
- Although of dated design and given that it is a 50-year-old plant, the housekeeping standards and overall cleanliness/upkeep of the plant facilities was notable.
- Although a thorough investigation was not completed, it appears that the plant has a good inspection program, performs regular maintenance and follows practices expected of a powerhouse integrity program which helps explain how it has achieved 99.9% reliability over the past 50 years of operation.
- Although described as running to its steam generating limits (without [N+1] redundancy on the steam generation/boilers) - the plant ancillaries have considerable redundancy in the form of – dual drives (steam and electric) on rotating equipment such as fans and pumps, over capacity with a second standby deaerator, back up equipment and modern controls

21.1 Did the fact that the Beatty Steam Plant is running without N+1 redundancy (or the fact that the Expo Steam Plant is expected to run without N+1 redundancy) impact the contingency planning exercise that TES undertook? Please explain.

22. Reference: Exhibit B-23, Appendix 5-1, p. 23

The primary objective of this report was to develop a Contingency Plan for back up steam generation required during the demolition and construction phases of the Creative Energy Steam Plant redevelopment. As mentioned earlier, the securing of a standby boiler and/or additional steam plant equipment for these purposes is but one aspect of the overall Contingency Plan. The timing and availability of the back up steam supply is schedule dependent and therefore must be integrated into the Master Project timeline.

22.1 While the primary objective of the contingency plan was with respect to back up steam generation required during the demolition and construction phases of the Project, please explain the extent to which the report could be used for problems that arise after the completion of the Project.

Alternatives to Temporary Boilers

23. Reference: Exhibit B-23, Appendix 5, p. 1 and BCUC Decision and Order G-38-19, pp. 55-56

The contingency plan demonstrates the feasibility of using temporary boilers to shore up the production capacity of the Beatty and Expo Plants in the case that for some reason, through the course of the project, demand exceeds available capacity. In addition, the contingency plan outlines the work that needs to be completed in respect of the temporary boiler project in advance of any construction work commencing. Specifically, the contingency plan developed by the TES Group and Creative Energy confirms a temporary boiler site plan, a rental and logistics plan, and outlines timelines, engineering requirements, high level cost estimates and preliminary risk register.

‘... Creative Energy’s contingency planning is not sufficiently developed to even provide information as to how and when it would deem temporary boilers to be necessary or, whether there are any other options that could be considered. If this is only a few days it may be possible to handle the problem by curtailing supply. If however, the timeline for installation is longer other options must be considered.’

- 23.1 Were alternatives other than temporary boilers considered during the preparation of the contingency report as a means of shoring up the production capacity of the Beatty Plant and the Expo Plant? Please explain.

Status of Contingency Planning

24. Reference: Exhibit B-23, Appendix 5 PDF p 181/393 and Appendix 5-1 page 36 of 45

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.

The Contingency Plan report, preliminary risk assessment and the experience of TES Group is provided in Appendix 5-1.

5.0 EXECUTION STRATEGY

Objective is to have a fully executable and well-defined contingency plan in place for the potential need for adequate back up heating plant services including replacement steam generation using rental boilers

- 24.1 Please confirm, or otherwise explain, that Appendix 5-1 cannot be described as a “complete contingency plan” and that this has not been provided in the evidence.

- 24.2 How does a Contingency Plan report differ from a Contingency Plan? Please explain.
- 24.3 Please confirm that the contingency plan prepared by TES is not the ‘fully executable and well-defined contingency plan’ identified in the Execution Strategy.
- 24.4 The term “for example” is used in the statement quoted above. What other information is not included in Appendix 5 that would ultimately be required in a detailed plan? Please provide a complete list.
- 25. Reference: Exhibit B-23, Appendix 5-1, p. 38**

6.2 Subproject Estimate Basis

The following factors/considerations were used as the basis for the estimate:

This is an effort and resource-based estimate and includes the following activities - collect the required data from the plant, assess the plant’s readiness and services required for rental boilers, develop a detailed scope of work for the required tie-ins, comply with all the required regulatory, stakeholder and related parties, provide engineering and technical guidance to the discipline engineers involved with the subproject, estimate the costs and timeline to source, install and commission the prescribed number and size of rental boilers.

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. The total cost estimate is based upon Professional Services Rate Sheets and has been based upon a Cost Reimbursable Form of Contract using a billable technical/engineering rate of \$150 to \$200/hrs

- 25.1 Please identify when TES’s final report will be prepared and provided to the Commission.

26. Reference: Exhibit B-23, Appendix 5-1, p. 41

7.1 Risk Register

A risk register is a tool in risk management and project management that is used to identify potential risks in a project or an organization. A preliminary risk register has been developed for the phases of the Temporary Boiler Subproject and will be fully completed prior to commencement of construction of Expo, with input from contractor, designer, owner and other stakeholders.

- 26.1 Please explain why a full risk register was not completed at this time.
- 26.2 Please explain whether or not the full risk register could impact the contingency planning.
- 26.3 When will a full risk register be completed and provided to the Commission for its approval?

27. Reference: BCUC Decision and Order G-38-19, p. 28 and Exhibit B-5, BCUC 1.28.1.5

With respect to risks related to interruption or degradation of service to customers, Creative Energy explained that in advance of construction it would develop a fulsome contingency plan which would include “contractual arrangements with boiler suppliers, space reservation on site permitting and service arrangements, and all other steps taken to prepare for such a need in advance.” An identified risk it considers difficult to control is if there is a sudden need to implement the contingency plan. If there is a sudden unexpected demand it might prove difficult to implement the plan on short notice as the contingency plan must assume a certain implementation period for boilers to be delivered and started up. Creative Energy explains that in such an instance it would not be a full customer outage but rather, a partial supply shortage during the early morning daily peak demand period. If this were to occur it would be mitigated by having customers implement temporary demand side measures to reduce their peak loads or adjust the timing of their peaks. However, Creative Energy confirms that temporary boilers will only be installed if the project falls behind and the Beatty Plant restart is expected to be delayed. [citation omitted]

28.1.5 Please discuss any risks of interruption or degradation of service to the customers before, during and after the contingency plan is implemented.

Response:

There is, of course, elevated risk of interruption or degradation of service around an alternate supply solution, which has to be implemented under a constrained schedule. Creative Energy would develop a fulsome contingency plan in advance of construction, including contractual arrangements with rental boiler providers(s), space reservation on site, permitting and servicing arrangements, and all other steps taken to prepare for such a need in advance. One risk has been identified which is difficult to control, is if the need to implement the contingency plan is more sudden than expected. The contingency plan must assume a certain implementation period for boilers to be delivered to site, connected and started up. If there is a sudden, unexpected demand, such as very cold weather in the summer period, leading to supply shortage, it might be difficult to implement the plan on such short notice.

It is important to note that the consequence is not a full customer outage, but a partial supply shortage during the daily peak demand period in the early morning. The impact would be mitigated by working with the high demand customers to manage and reduce their peak loads or adjust the timing of their peaks by temporary demand side measures.

27.1 Please confirm that Appendix 5 and 5-1 do not contain a ‘fulsome contingency plan’ which includes “contractual arrangements with boiler suppliers, space reservation on site permitting and service arrangements, and all other steps taken to prepare for such a need in advance” as warranted by Creative Energy in its IR response, or otherwise provide.

- 27.2 Please explain whether Creative Energy continues to intend to have a contingency plan, detailing these points, prepared in advance of construction.
- 27.3 Please provide the date when this plan will be available for the Commission’s approval.
- 27.4 Please confirm, otherwise explain, that it continues to be Creative Energy’s intention that temporary boilers will only be installed if the project falls behind and the Beatty Steam Plant restart is expected to be delayed.
- 27.5 Please confirm that there continues to be risks associated with the time needed to implement the contingency plan that TES contemplates, including if there is a sudden unexpected demand.
- 27.6 Please explain whether it is Creative Energy’s intention that a resulting supply shortage would be dealt with through temporary demand side measures until temporary boilers could be sourced, shipped, assembled and started.
- 27.7 Please confirm, otherwise explain, that under the TES contingency plan, there continues to be an “elevated risk of interruption or degradation of service around an alternate supply solution, which has to be implemented under a constrained schedule”.
- 27.8 Please confirm, otherwise explain, that the timelines for sourcing, shipping, assembling and starting the temporary boilers, as estimated in the TES contingency report, would make it impossible or very challenging to respond to very cold weather in the summer period in a timely manner.
- 27.8.1 How does Creative Energy propose to address this risk?

Costs

28. Reference: Exhibit B-23, Appendix 5-1, pp. 12

The following cost estimates were completed to an AACE Class V accuracy of -50%/+50%:

- **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

- 28.1 Please explain whether Creative Energy intends to complete the rental boiler and engineering and rental boiler tie-in as part of the planning and construction of the main Project.
- 28.2 Which party, Creative Energy or the Developer or others, will be responsible for these costs? Please explain.
- 28.3 To the extent temporary boilers are required and the other costs are incurred, please confirm that Creative Energy will be responsible for these costs, to the extent they result from schedule delays caused by, or in the control of, Creative Energy.

- ii. **Confirmation that Ellis Don and WSP have been or will be engaged to take on the Proposed Project. In the event an agreement with either of them cannot be reached, the Panel will make any CPCN subject to Creative Energy confirming the selection of a General Contractor and Design Engineering Company with the requisite experience that is acceptable to the BCUC;**

29. Reference: Exhibit B-23, Appendix 6

Appendix 6

Commission Directive 3.II.ii. – Design Engineering and General Contractor

This directive provides that BCUC approval of the requested CPCN will require approval by the Panel of either (i) confirmation that Ellis Don and WSP have been or will be engaged to take on the Proposed Project, or (ii) in the event an agreement with either of them cannot be reached, the Panel will make any CPCN subject to Creative Energy confirming the selection of a General Contractor and Design Engineering Company with the requisite experience that is acceptable to the BCUC.

Creative Energy confirms that at this time neither Ellis Don nor WSP have been engaged, and that no decision has been made on a General Contractor or Design Engineering company. ICON Construction Group is currently engaged to complete the redevelopment pre-construction activities only, such as preliminary scheduling and budgeting.

Immediately following CPCN approval by the BCUC, Creative Energy plans to undertake staged competitive processes to secure qualified parties for Design Engineering services and the role of General Contractor. Creative Energy is of the view that it would not be cost-effective to begin these competitive processes prior to obtaining the requested CPCN from the BCUC. Until CPCN approval has been obtained, it is not known whether or when the project will proceed and it would be challenging, for example, for the Developer to devote resources to undertaking these processes and for proponents to put their best effort into a proposal in terms of details and bid price.

Accordingly, Creative Energy understands that the BCUC Panel will make any CPCN subject to Creative Energy confirming the selection of the Design Engineering company and General Contractor with the requisite experience that is acceptable to the BCUC. Creative Energy's outlines below a proposed process to coordinate Creative Energy's activities to identify and select the best Design Engineering company and General Contractor with the BCUC's oversight of these selections as contemplated by this directive of the Panel.

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.

Creative Energy considers that the above coordinated process will provide for the required BCUC oversight and the competitive acquisition of these services. In other words, at no stage is the service provider effectively selected (by either Creative Energy or the BCUC) prior to a competition.

Creative Energy notes that it will need timely confirmation from the BCUC of the acceptability of the Design Engineering company and shortlist of General Contractors to avoid project delays.

- 29.1 Why were Ellis Don and WSP not engaged?
- 29.2 Please provide an approximate time frame for the competitive processes to be completed.
- 29.3 Will the BCUC have the opportunity to review the results of the RFPs for the Design Engineering Services? Please explain.
- 29.4 On what basis will Creative Energy select the Design Engineer Service? Please be specific and provide weightings to the criteria it intends to use.
- 29.5 Does Creative Energy guarantee that it will select the lowest priced bidder with a fully compliant package for the General Contractor? Please explain.
 - 29.5.1 If no, please provide any other criteria Creative Energy will consider and its expected weightings.
- 29.6 Please provide Creative Energy's expectation of 'timely confirmation'.

- iii. **Completion and submission of a Preliminary Project Schedule and within 60 days of engaging the General Contractor, a detailed Project Schedule outlining the construction and operation schedule, including critical dates of key events, a chart of major activities showing the critical path (e.g. GANTT chart), and the timing of approvals required from other agencies;**
- 30. Exhibit B-23, Appendix 7 and Appendix 7-1 PDF page 277 and 278/393**

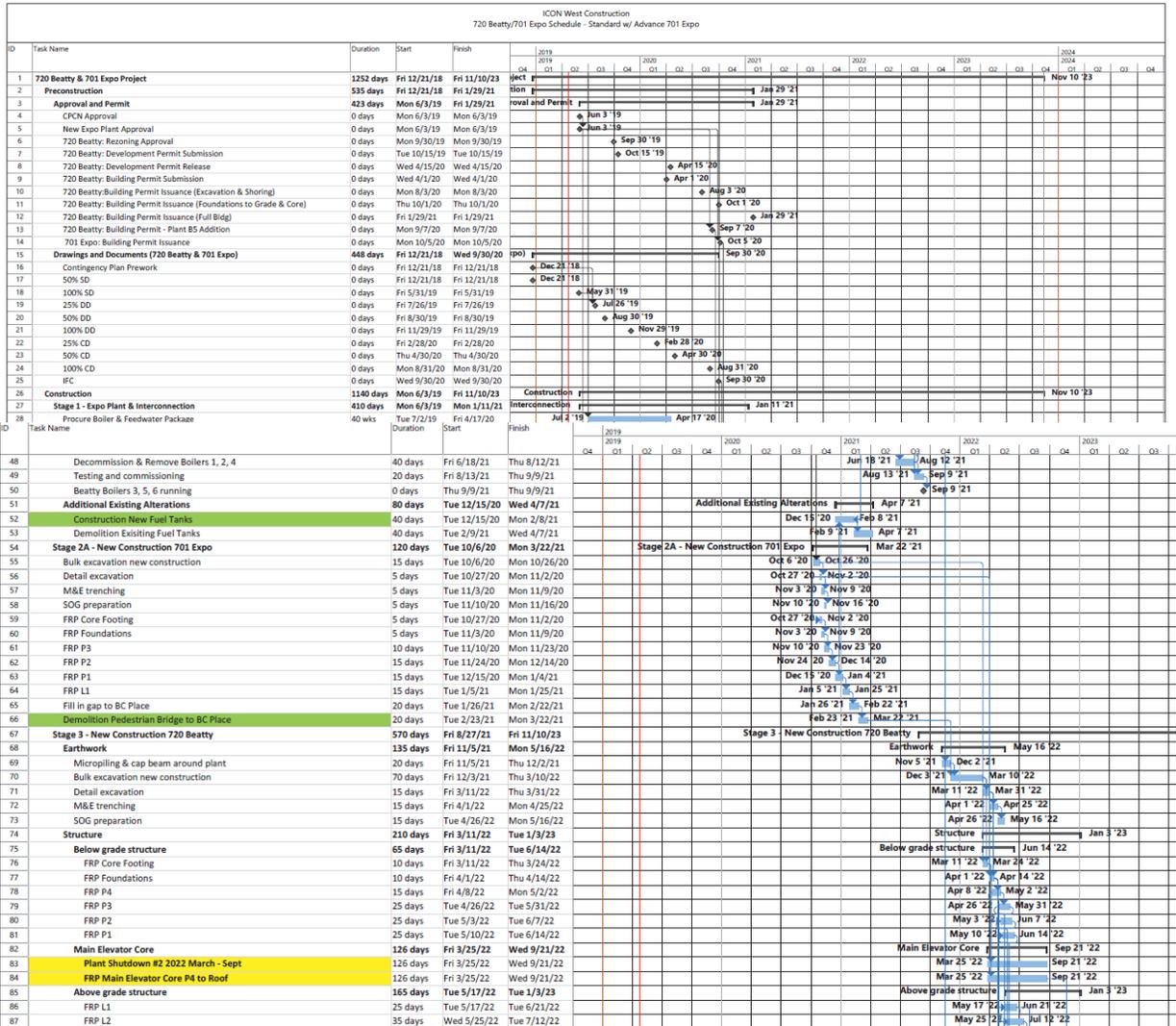
Appendix 7

Commission Directive 3.II.iii. – Project Schedule

This directive provides that BCUC approval of the requested CPCN will require approval by the Panel of a Preliminary Project Schedule and within 60 days of engaging the General Contractor, a detailed Project Schedule outlining the construction and operation schedule, including critical dates of key events, a chart of major activities showing the critical path (e.g. GANTT chart), and the timing of approvals required from other agencies.

ICON Construction Group is currently engaged to complete the redevelopment pre-construction activities, such as preliminary scheduling and budgeting. ICON has prepared a detailed preliminary project schedule (GANTT chart), which is provided in Appendix 7-1.

As discussed in Appendix 6, Creative Energy expects that the General Contractor for the project will be engaged by December 2019 assuming BCUC approval of the CPCN by June 3, 2019. Creative Energy will submit a detailed project schedule to the BCUC within 60 days of engaging the General Contractor, as directed.



- 30.1 Please briefly itemize all the tasks that are included in the redevelopment pre-construction activities being conducted by Ikon.
- 30.2 Does the GANTT chart provided in Appendix 7-1 represent the complete Preliminary Project Schedule being provided at this time, or is additional information available? Please explain.
- 30.3 If additional information is available please provide or identify where it is contained in the exhibit.
- 30.4 Please provide an updated expectation for the engagement of the General Contractor given that the BCUC process is not yet complete.

- 30.5 Has Ikon updated its Preliminary Project schedule given that the BCUC process is not complete? Please explain and provide any updated scheduling that may have been completed.
- 30.6 There are several areas in the GANTT chart that are highlighted in yellow or green. Please provide the legend for the highlights.

iv. Removal of Land from the Deferral Account proposal; and

31. Reference: Exhibit B-23, Appendix 8 and Exhibit B-1, page 72

Creative Energy confirms that it agrees with this determination and requirement of the Commission Panel. Table 9 of the Application shows the estimated amounts to be removed from rate base as a result of the Proposed Project, with the final row of the Table showing the estimated total amount excluding land. The net book value of retired assets excluding land (currently estimated to be \$2,589,400) is the amount intended to be recorded in the regulatory deferral account, though Creative Energy confirms that could have been more clear in the Application. The amount is an estimate at this time. The final amount will be calculated after detailed project design and precise timing of retirements have been determined.

For greater certainty, Creative Energy confirms that its proposal is as follows:

- to remove from rate base the total net book value of retired assets including the land portion, and
- to record in the regulatory deferral account the net book value of retired assets excluding the book value of such land portion (currently estimated to be \$2,589,400 excluding the value of the land portion).

Table 9 – Estimated Retired Assets and Land

Steam Production Plant	Net Rate Base 2017	Est. % to be Retired	Est. Retired Amount	Notes
Land	565,500*	50%	282,800	
Structures & Improvements	1,360,100	100%	1,360,100	Completely removed
Boiler Plant Equipment	3,381,100	30%	1,014,300	Boilers #1 and #2 already 100% depreciated
Boiler Tanks Equipment	42,100	100%	42,100	Completely removed
Boiler Auxiliary Equipment	235,200	50%	117,600	
Accessory Electric Equipment	110,500	50%	55,200	
Total Steam Production Plant	5,694,500		2,872,200	
Total Excluding Land	5,129,000		2,589,400	

31.1 Please elaborate on how the detailed project design and timing of retirements can affect the retirement of the assets and please comment on whether or not the % to be retired will potentially change.

31.2 Please provide a range of the changes that could occur in either direction from the \$2,589,400 expected at this time and explain why.

v. Filing of an executed PavCo SRW Agreement with a 5-year notice provision."

32. Reference: Exhibit B-23, Appendix 9 page 21 of 56 and Workshop Transcript p 651.25-p 661.3

PavCo and Creative Energy agree that if Creative Energy is not then in default of any of its obligations under this Agreement, Creative Energy may, by delivery of written notice to PavCo at any time not later than ~~thirty-six~~seventy (36/70) months prior to the expiration of the Term, request that PavCo consider (in PavCo's sole and unfettered discretion) the granting of a renewal or extension of this Agreement for such period of time and upon such modified or additional terms as PavCo may require and as PavCo and Creative Energy may (in their respective unfettered discretion) agree upon. Upon receipt of the foregoing notice from Creative Energy requesting that PavCo consider the granting of a renewal or extension of this Agreement, PavCo will notify Creative Energy by no later than sixty-six (66) months prior to the expiration of the Term as to whether PavCo is willing (in PavCo's sole and unfettered discretion) to grant any renewal or extension of this Agreement, and if so, the period of time of such renewal and any modified or additional terms to this Agreement PavCo would require as a condition to such renewal or extension. If PavCo delivers written notice confirming PavCo's willingness to consider any renewal or extension of this Agreement, the parties will enter into discussions and negotiations to endeavour to finalize a formal agreement expressly renewing or extending the Term of this Agreement (a "Renewal Agreement"), however no agreement to renew or extend this Agreement will exist unless and until Creative Energy and PavCo will, each in their respective unfettered discretion, have executed a Renewal Agreement on or before the date which is sixty (60) months prior to the expiration of the Term.

And we have a five-year notification and it - - if the stadium is still there, our view is PavCo would renew the lease, because there is really no other viable use for space like that in a major stadium, that doesn't introduce security risks

- 32.1 Please confirm that the amendments to section 3.1 of the Terms of Instrument do not require PavCo to enter into negotiations to extend or renew the statutory right of way, other than if PavCo in its sole and unfettered discretion is willing to consider extension or renewal.
- 32.2 Please confirm that the Stadium might not be in place at the time of renewal.
- 32.3 Please comment on the types of security risks that occur due to the location in the Stadium and would make the space unsuitable for other tenants.
- 32.4 Please comment on why Creative Energy represents a lower security risk than other tenants, particularly in light of the natural gas presence.
- 32.5 Please provide Creative Energy's view of the issues that Pavco will be considering at the time of requested renewal.
- 32.6 Please provide Creative Energy's view of the likelihood that PavCo will be willing to renew the Agreement on similar or equivalent terms that the Utility is receiving under the current agreement.

33. Reference: Exhibit B-23, Appendix 9-2, page 6 and 21 of 56

- (14) "Commencement Date" means the date upon which Creative Energy first commences any construction activities with regard to the Utility Infrastructure on the SRW Areas in accordance with the Approved EC Work Schedule.

3. TERM

3.1 Term

The term ("Term") of this Agreement will commence on the Commencement Date and will continue to the 40th anniversary of the Commencement Date, unless terminated pursuant to provisions of this Agreement.

PavCo and Creative Energy agree that if Creative Energy is not then in default of any of its obligations under this Agreement, Creative Energy may, by delivery of written notice to PavCo at any time not later than ~~thirty-six~~seventy (3670) months prior to the expiration of the Term, request that PavCo consider (in PavCo's sole and unfettered discretion) the granting of a renewal or extension of this Agreement for such period of time and upon such modified or additional terms as PavCo may require and as PavCo and Creative Energy may (in their respective unfettered discretion) agree upon. Upon receipt of the foregoing notice from Creative Energy requesting that PavCo consider the granting of a renewal or extension of this Agreement, PavCo will notify Creative Energy by no later than sixty-six (66) months prior to the expiration of the Term as to whether PavCo is willing (in PavCo's sole and unfettered discretion) to grant any renewal or extension of this Agreement, and if so, the period of time of such renewal and any modified or additional terms to this Agreement PavCo would require as a condition to such renewal or extension. If PavCo delivers written notice confirming PavCo's willingness to consider any renewal or extension of this Agreement, the parties will enter into discussions and negotiations to endeavour to finalize a formal agreement expressly renewing or extending the Term of this Agreement (a "Renewal Agreement"), however no agreement to renew or extend this Agreement will exist unless and until Creative Energy and PavCo will, each in their respective unfettered discretion, have executed a Renewal Agreement on or before the date which is sixty (60) months prior to the expiration of the Term.

- 33.1 How long does Creative Energy expect, in total, to spend between the 'Commencement Date' and the time that Creative Energy will have completed construction and be fully operational in the premises?
- 33.2 Please explain the reason for and implications of the insertion of the words "'may require and as PavCo' and Creative Energy may (in their respective unfettered discretion) agree upon..."
- 33.3 Please explain the difference between a 'renewal' and 'extension' of the Agreement.
- 33.4 Please confirm the CEC's interpretation that there could be a maximum of 6 months time available to negotiate, formalize and execute a final agreement (between the 66 month

notification deadline from PavCo and the 60 month deadline for executing a Renewal Agreement prior to the expiration of the Term.

- 33.5 Does Creative Energy believe that it would require Commission approval to execute a Renewal Agreement?
- 33.5.1 If yes, how long does Creative Energy believe it would take to receive Commission approval?
- 33.5.2 If yes, would the period that the Commission requires to make an approval need to be undertaken during the six month period? Please explain.
- 33.5.3 If no, why not.
- 33.6 Please provide a brief discussion as to the risks and benefits of having a five year versus a three year notice provision. Under what circumstances would a shorter notice provision work in Creative Energy's favour?
- 33.7 If Creative Energy could negotiate an agreement with a notice period of up to 5 years but down to 3 years, and an established time frame for reply, does Creative Energy consider that this would have complied with the Commission directive? Please explain why or why not.
- 33.8 In the event of renewal, would Creative Energy expect to pay full market rates to PavCo? Please explain.
- 33.9 How long does Creative Energy expect that it would take to acquire (either rent or purchase) adequate premises if the Agreement is not renewed? Please explain.
- 33.10 In the event of non-renewal, would Creative Energy expect to acquire (either rent or purchase) space equivalent in value to that which it is receiving under the PavCo agreement, or would Creative Energy be willing to move to less valuable space.
- 33.11 Please confirm that the 'not later than seventy months' means that Creative Energy could request an extension of the agreement with a longer lead time, such as 80 months prior to the expiry date.
- 33.12 If Creative Energy were to request the granting of a renewal earlier than 70 months prior to the expiry of the term, e.g. at 80 months prior to the expiry, by when would PavCo be required to make a reply?

34. Reference: Exhibit B-23, Appendix 9-2 page 21 of 56

For greater certainty, Creative Energy acknowledges that:

- (a) Creative Energy has no rights or options to renew this Agreement or to extend the Term unless PavCo otherwise expressly agrees in writing to any such renewal or extension following receipt of a request from Creative Energy as contemplated in this Section 3.1 above; ~~and~~
- (b) PavCo may consider any such request in its sole and unfettered discretion and PavCo shall have no obligations to agree to any request or proposal for any renewal of this Agreement nor any extension of the Term; and
- (c) if PavCo and Creative Energy, each in their respective unfettered discretion, have not executed a Renewal Agreement on or before the date which is sixty (60) months prior to the expiration of the Term, then, unless PavCo and Creative Energy otherwise expressly agree, this Agreement will terminate upon the expiry of the Term.

- 34.1 Please confirm that a situation of non-renewal would require Creative Energy to relocate away from a location likely to be wholly satisfactory.
- 34.2 Please confirm that, in the event of non-renewal, there is likely to be significant costs accruing to the ratepayer to move Creative Energy.
- 34.3 Please confirm that PavCo has no obligation to work constructively towards a mutual agreement with Creative Energy to renew the Agreement.
- 34.4 Did Creative Energy consider including a clause requiring PavCo to work cooperatively with Creative Energy to renew its agreement? Please explain why or why not.
- 34.5 Please comment on whether or not the current Agreement represents a better than market rate for Creative Energy at the present time and provide an estimate of the % benefit that Creative Energy is receiving if so, plus total quantification of the benefit.
 - 34.5.1 Please confirm that any financial benefit Creative Energy is receiving from PavCo as a result of this transaction will likely be diminished if the Utility is required to move.