YUKON ENERGY CORPORATION
2021 GENERAL RATE APPLICATION

Utilities Consumers' Group
Information Requests No. 2

UCG-YEC-2-1

Reference: Low Water Reserve Fund Report Table 1 Calculations DCF and Table 2 DCF Continuity Schedule 2013-2017(Preliminary);
Low Water Reserve Fund Report Table 1 Calculations LWRF and Table 2 LWRF Continuity Schedule 2017 and 2018
Low Water Reserve Fund Report Table 1 Calculations LWRF and Table 2 : LWRF Continuity Schedule 2019 and 2020, April 2021

Questions:

a) Is Yukon Energy aware that the Board ordered you to file at each years end a LWRF Report?
b) Why is that Yukon Energy did not do so?
c) Will Yukon Energy comply going forward?
d) As the continuity schedule for 2020 exhibits a negative ending balance of $4.272million, when and how will Yukon Energy recover this?
e) With high water levels this year, does Yukon Energy forecast a positive return to the LWRF in 2021?
f) If yes, do you have a conservative estimate?
g) Does the table and schedule listed April 2021 comply with the OIC 2021-16, (7) (a) or (b)? If not, why not?
h) Do these above tables and schedules listed comply with ALL the Board directions on the LWRF? If not why not?

UCG-YEC-2-2

Reference: OIC 2021-16 Section 9 (1-10)

Question:

Does Yukon Energy see any changes resulting from the above OIC as to what was determined by the Board in Order 2019-08 Reason for Decision for the Low Water Reserve Fund(LWRF) going forward past November 1, 2020? Please explain.

UCG-YEC-2-3

Reference:3.3 Low Water Reserve Fund
Appendix A to Board Order 2019-08 — Reasons for Decision 9
30. With respect to the DCF, the Board concluded that, given the isolated nature of the Yukon environment, the ramifications that low water events can have on electricity prices and the need to mitigate those impacts, a DCF-type of mechanism was required. The Board stated that a simpler mechanism for adjusting for variances between the approved forecast for hydro generation and thermal generation and actual hydro generation and thermal generation in a test year is needed. However, the Board found that the DCF is complex and that it does not show the hydro generation and thermal generation in a given year when actuals are determined because the actuals are based on modelled results. **Therefore, the Board directed YEC to create a deferral account that reconciles forecasts with actuals, not modelled results**. **Further, the onus is on YEC to adequately explain any variance between actual results and its forecast amounts. For these reasons, the Board directs YEC in future GRA filings to show actual hydro and thermal generation results when comparing previous and forecast test years.**

Question:

Does Yukon Energy Low Water Reserve Fund Report Table 1 Calculations LWRF and Table 2 LWRF Continuity Schedule 2017 and 2018 **and** Low Water Reserve Fund Report Table 1 Calculations LWRF **and** Table 2 : LWRF Continuity Schedule 2019 and 2020, April 2021 comply with these directions? Please explain.

UCG-YEC-2-4

Reference:3.3 Low Water Reserve Fund Reference:3.3 Low Water Reserve Fund

Appendix A to Board Order 2019-08 — Reasons for Decision 9
40. YEC filed a revision to its LWRF on February 25, 2019. In Board Order 2019-04 (first compliance filing decision), the Board did not accept YEC's revised LWRF. In that decision, the Board noted that YEC accepted the forecast risk for incremental generation costs for incremental loads in excess of the approved forecast. 41. In the first compliance filing decision, the Board recognized there are two regulatory principles to be met. First, YEC bears the risk of revenue requirement items varying from approved GRA forecasts. Second, costs due to variances from forecast thermal generation fuel volumes should be assigned to the utility when those costs are due to variances from forecast load or maintenance requirements. The Board found that the steps to separate thermal generation changes due to overall load changes from thermal generation changes due to water conditions included in the LWRF deferral account proposal did not adequately reflect these two regulatory principles. **42. Accordingly, the Board considered it necessary to preserve the principle that costs should be assigned to the utility when total load varies from forecast load.** YEC's proposal in the compliance filing created an asymmetrical risk profile whereby YEC imposed certain risks – e.g. incremental generation costs to customers – and yet there is no offsetting of potential benefits that YEC would gain, and those benefits would not be shared with customers – e.g. incremental sales and amortization of costs over greater sales volumes. **Therefore, the Board considered that incremental generation due to incremental load must be removed from the LWRF calculations because this is a risk borne by the utility**.

Question:

Does Yukon Energy Low Water Reserve Fund Report Table 1 Calculations LWRF and Table 2 LWRF Continuity Schedule 2017/2018 **and** Low Water Reserve Fund Report Table 1 Calculations LWRF **and** Table 2 : LWRF Continuity Schedule 2019 and 2020, April 2021 comply with these directions? Please explain.

UCG-YEC-2-5

Reference:3.3 Low Water Reserve Fund
Appendix A to Board Order 2019-08 — Reasons for Decision 9
41. A second compliance filing was directed by the Board. **3.3.2 YEC's 2017-18 GRA Second Compliance Filing** 43. YEC submitted its second compliance filing on September 23, 2019, and provided further changes to its proposed LWRF. YEC provided details of the changes to its LWRF in Appendix 2.1 and Attachment 2.1-1 (LWRF Term Sheet) of its September 23, 2019, second compliance filing. Included as part of the application is a revised Attachment 2.1-1, the LWRF term sheet which retains the general structure of the previously approved term sheet and fund procedures. Of the five items listed in the term sheet, the fifth on the list states: The new mechanism proposed in the 2017-18 GRA to provide that costs for YEC thermal generation savings (excess) are calculated so that YEC's final fiscal year expense for the total expected thermal generation (i.e. YEC expense after all transfers) is 90% LNG and 10% diesel as assumed in the GRA forecast, subject to the constraint that the LNG share of any transfer into or out of the LWRF cannot exceed 100%. **Views of the Board 3.3.2.1 Current test period** 47. Board Order 2019-04 required YEC to determine what the actual thermal generation with water availability impacts would have been at the forecast (rather than the actual) level of load. To test YEC's assumptions, the Board requested in YUB-YEC-1-4 an explanation of YEC's separation of changes in thermal generation costs due to changes in water conditions and due to changes in load (actual load). *The questions included: c)* ***For a test period in which a load forecast has been determined, at the start of that test year would YEC expect the forecast load to equal its forecast?*** *48. The Board was seeking to determine if the generation mix (hydro and thermal) is expected to incrementally change as the expectation for load changes. For example, at the time of the forecast, YECSIM modelled generation output for the forecast load level.* ***However, as the expectation for load changes, in this case, an upward change, does the incremental generation mix change (i.e. weight more heavily to thermal) versus hydro generation? If the generation mix changes on an incremental basis, how is this phenomenon reflected in YEC's separation of load and water level effects on the LWRF?*** *Also,* ***if there are differences, would they be material****?*

Question:

From the preamble above: Please answer all the above questions in bold/italics for the Low Water Reserve Fund Table 1 Calculations LWRF and Table 2 : LWRF Continuity Schedule 2019 and 2020, April 2021? Please explain each answer.

UCG-YEC-2-6

Reference:3.3 Low Water Reserve Fund Reference:3.3 Low Water Reserve Fund

Appendix A to Board Order 2019-08 — Reasons for Decision 9

49. YEC responded that these question was in effect asking to rerun the model after each year, assuming forecast load and actual water conditions, in order to estimate actual thermal generation for the forecast load. YEC stated that this was not achievable with the current model. 50. YEC has previously provided testimony that the results of the model cannot be retrospectively verified and that the Board has previously identified its concerns with the verifiability of the model in Board Order 2015-01 and Board Order 2015-06. The Board remains concerned that the estimate provided by YEC does not accurately reflect the generation costs for the incremental load and questions if the generation costs are muted by the modelling of the total load. 51. With respect to the second compliance filing term sheet, the UCG argued that the use of the term sheet increases the LTA thermal generation estimate used at the actual 2018 generation load. After preparing responses to information requests and the technical session, YEC concluded that the term sheet approach provides a more accurate result and can be considered more straightforward to implement. 52. The Board agrees that the term sheet provides a more

straightforward result than an estimate (the fixed change factor estimate) based on the term sheet. For the 2017-18 test period, the Board directs YEC to use the term sheet and to amend the paragraph that refers to the fixed change factor to remove fixed change factor references from the term sheet. **Further, as the Board has ruled that the LWRF is only applicable up to forecast load, the Board only approves term sheet calculations that are equal to or below the forecast load.**

Question:

Does Yukon Energy Low Water Reserve Fund Report Table 1 Calculations LWRF and Table 2 LWRF Continuity Schedule 2017/2018 **and** Low Water Reserve Fund Report Table 1 Calculations LWRF **and** Table 2 : LWRF Continuity Schedule 2019 and 2020, April 2021 comply with these directions? Please explain each.

UCG-YEC-2-7

Reference:3.3 Low Water Reserve Fund Reference:3.3 Low Water Reserve Fund
Appendix A to Board Order 2019-08 — Reasons for Decision 9
53,The Board, in IR YUB-YEC-1-8, inquired about a paragraph in the term sheet concerning the thermal fuel mix. YEC responded that the paragraph was required as it establishes rules for addressing fuel mix to LTA thermal generation transfer costs. It should be noted that the Board previously accepted the fuel mix as part of YEC's 2017-18 GRA and that no further direction was given for YEC to comply with on this issue. However, further information on fuel mix has been provided in YEC's second compliance filing. The Board will not reopen this issue in the compliance filing. **However, due to the concerns the Board has regarding YEC's fuel mix calculations and the unverifiable nature of the results of those calculations provided in the second compliance filing and the resulting thermal fuel costs, those calculations will not be accepted by the Board for use in future GRAs**.

Question:

Does Yukon Energy in the Low Water Reserve Fund Report Low Water Reserve Fund Report Table 1 Calculations LWRF and Table 2 : LWRF Continuity Schedule 2019 and 2020, April 2021 comply with these directions? Please explain.

UCG-YEC-2-8

Reference:3.3 Low Water Reserve Fund Reference:3.3 Low Water Reserve Fund
Appendix A to Board Order 2019-08 — Reasons for Decision 9
3.3.1Term Sheet 55. In response to a Board IR concerning quarterly and annual reporting, YEC responded:… the LWRF implementation at fiscal year-end requires prior completion of a GRA process. Accordingly, LWRF determinations for GRA test years cannot be concluded until the GRA is concluded – and can be addressed therefore as part of the process for a GRA. After GRA test years have been addressed, the LWRF determinations should proceed on an annual basis until the next GRA test years occur. 56. The Board agrees with the quarterly and yearly reporting being added to the term sheet.

Question:

Has Yukon Energy complied with quarterly and yearly reporting from this determination?

UCG-YEC-2-9

Reference:3.3 Low Water Reserve Fund Reference:3.3 Low Water Reserve Fund
Appendix A to Board Order 2019-08 — Reasons for Decision 9
Views of the Board
95. Going forward, the Board provides the following summary on its findings in this decision and future directions for YEC regarding the LWRF:

a) For forecasting hydro generation for GRA purposes, the Board's focus in determining the revenue requirements for these and future test years will continue to be on the reasonableness of YEC's forecasts and forecasting accuracy.

b) The Board has previously approved the use of LTA by YEC to forecast its GRA hydro generation requirements. Consideration of future trends due to phenomenon such as climate change will be evaluated by the Board in subsequent proceedings when assessing the forecasting accuracy of hydro generation. This allows YEC the option to continue to use LTA for its hydro generation forecasts.

c) The approved LWRF will continue to cover variances due to deviations from forecast water levels up to forecast load levels. This is expected to reduce the risk to YEC of changes in hydro generation due to changes in water levels up to forecast load levels. As stated in Board Order 2019-04, this maintains the principle that ratepayers carry the risk for changes in water levels that was established when the LWRF was initially established (with the recognition that costs for generation for loads above forecast are a utility risk). YEC has stated that this should be trued up on an annual basis when there is not a GRA before the Board and as part of a GRA when there is such an application before the Board. Although this proposal is not optimal in that it does not result in an annual true-up, the Board accepts that

this will provide a better price signal to customers than the previous LWRF submitted by YEC. As the LWRF will be for actual values compared to forecast values up to the load forecast, this should resolve the issues with respect to fuel mix ratios as the deferral account will reflect actual fuel mix.

d) The Board will not accept YEC's use of the expected long-term cost of power in its LWRF calculations. As stated, this is redundant to accrual and depreciation accounting and creates unnecessary complexities.

e) The Board will not accept YEC's thermal fuel calculations for the reasons cited earlier in the decision. In its future GRAs, YEC is directed to compare actual fuel costs (for up to forecast load) to forecast fuel costs for LWRF and GRA purposes.

f) YEC should consider the Board's comments in paragraphs 80 and 81. The Board recognizes that the directly focused LWRF above does not provide customer protection in years of drought. Therefore, the Board suggests that YEC examines whether a drought deferral account could be established to mitigate the effects of any future drought event(s). In its review of this issue, for example, YEC could consider the possibility of establishing a rate rider, on a cents/kWh basis, to build up the account and apply to the Board when it recognizes a drought situation and requires mitigation from this account.

g) The Board directs YEC to address intergenerational equity issues with respect to the LWRF in the next GRA.

Question:

Does Yukon Energy comply with all of the a) to g) directions as to what was determined by the Board in Order 2019-08 Reason for Decision for the Low Water Reserve Fund in the filing of Low Water Reserve Fund Report Table 1 Calculations LWRF and Table 2 : LWRF Continuity Schedule 2019 and 2020, April 2021? Please explain for each question.

UCG-YEC-2-10

Reference: Rate Schedule 39

Question:

a) Please provide the total amount of money forecast to be collected via Rate Schedule 39 for the 2021 test year.
b) Please provide how any new money from this schedule will adjust the revenue requirement requested for the 2021test year.
c) Do all the mines on the integrated grid pay portion of the costs of the C/S transmission line, sub-stations on this line, as well as all other associated costs to this line? If no, please explain why not? If yes, please explain how much each mine pays in percentage to usage (i.e. 85% or ?) and amount in $?
d) Please give the total load forecast for each mine on the Mayo/Keno grid for the 2021 test year?
e) Please give the total amount of power forecast for all other customers on the Mayo/Keno grid for the 2021 test year?
f) Please explain how Yukon Energy determined that 85 per cent of the costs of the Mayo/McQuesten transmission line and StatCam was allocated to the two mines to determine the Interim Rate Schedule 29. Please do not give the old out-dated answer of "that's how it has always been done in the Yukon, so this is how we do this now."
g) Please give the forecast load for the Minto mine in the 2021 test year?
h) Please give the amount of dollars forecast to be collected from the Minto mine in the 2021 test year.

UCG-YEC-2-11

Reference: YUB-YEC-1-48 Table 1 p.2 of 4

Question:

How are the differences/variances in this table accounted for going forward?

UCG-YEC-2-12

Reference: UCG-YEC-1-22 Cost of Debt

Questions:

a) How is the 120 basis points added to Bond rate determined?
b) Does the YUB determine the interest rate to be charged for **each** GRA?

UCG-YEC-2-13

Reference: YUB-YEC-1-49 Table 6 and YUB-YEC-1-50
YEC states in response to YUB-50 that *"The Faro rental site was commissioned and in service December 1, 2020. The construction of the site was primarily carried out by YEC staff. Construction support was provided through existing vendor service contracts."* In response YUB-49 YEC provides a table with unelaborated breakdown of costs.

Questions:

a) Please provide a further breakdown of each of the 5 major listed costs in Table 6 to clearly demonstrate a business case for the cost of this project.
b) Explain the total cost difference from Table 6 of $2.446 million and the cost from Tab 5 of the Application of $2.037 million.

UCG-YEC-2-14

Reference: UCG-YEC-1-26 (c) and (d) In this request UCG asks c) Explain why the vice president cannot do the job of FN relations? and d) What exactly is the VP job description? YEC responds as which VP?

Questions: Please answer both question with VP of Business and Corp. Development as the target.

UCG-YEC-2-15

Reference: In UCG-YEC-1-53 (e) for WH 2 project, *YEC responds: "Internal work includes: YEC engineering, Project Management, procurement, health and safety, operations, and site construction monitoring support. The estimated cost of YEC internal support is $500,000."*

Questions: Please provide a breakdown of each portion referenced above with costs associated for each and what work was done for each.

UCG-YEC-2-16

Reference: Application Tab 5.4.1.1 p. 5-28 *and* Response to YUB-YEC-1-70
In response to YUB-YEC-1-70, Yukon Energy states: "*EAM implementation is a separate project from Asset Management Framework (AMF) and PAMMS."*

Question:

a) Please give the total cost of the Asset Management Plan from 2013/14 until today. Include all costs for Enterprise Management (EAM) System Purchase, Enterprise Management (EAM) Implementation, Asset Management Framework (EMF), PAMMS and the Enterprise Resource Plan (ERP) with 2019 Upgrade. Break into component costs and then give total.
b) Are these plans now all in place and operating?

UCG-YEC-2-16

Reference: Yukon Energy response to YUB-YEC-1-47 (a to d)

Questions:

a) Is YEC now planning to add all past DSM cost to rate base?
b) Exactly what are YEC's current DSM programs?
c) Demonstrate how YEC has validated the cost to benefit for each program.

UCG-YEC-2-17

Reference: Yukon Energy response to YUB-YEC-1-48 Table 1

Question: How does Yukon Energy handle the differences/variances of these projects when applying them into the books for rate base?

UCG-YEC-2-18

Reference: Yukon Energy response to YUB-YEC-1-51 p.6 Table 2
Costs for STATCOM/SVC and Syn. Cond. for SkTP/MMTL

Question: Do you now have an updated costs on each of these projects? If yes, please give.

UCG-YEC-2-19

Reference: Yukon Energy response to YUB-YEC-1-51 p. 7 Table
Preliminary Cost Budget SKTP and (k) states L180 to be completed and energized March 2021

Question:
a) Is this now complete and energized?
b) Please give updated cost of this complete project compared to budget.

UCG-YEC-2-20

Reference: Yukon Energy response to YUB-YEC-1-64

Question: Considering the business plan explained in this response, how will Yukon Energy track and demonstrate tangible benefits? Explain.

UCG-YEC-2-21

Reference: Yukon Energy response to YUB-YEC-1-99
Whitehorse Diesel Substation improvements.

Question: Please explain exactly what work Yukon Energy completed for this $100k improvement.