CW-YEC-01

Issue: Peak Load

Reference: 2021 General Rate Application, Table 2.2

Preamble: On line 29, YEC indicates the integrated system peak.

Request:

(a) Please provide the peaks for each of (i) Wholesale, (ii) Industrial, and (iii) the balance of the YEC system for each of 2018 Approved, 2018 Actual, 2019 Actual, 2020 Forecast and Forecast 2021.

(b) Please provide the reason for changes in peak demands for each of the years in each of (i) Wholesale, (ii) Industrial, and (iii) the balance of the YEC system.

(c) Please fully explain the impact of changes in peak demand on required capital investment.

CW-YEC-02

Issue: Sales

Reference: 2021 General Rate Application, Table 2.2

Preamble: YEC provides Actual Sales. CW requires normalized data as well.

Request:

(a) Please provide an updated Table 2.1, with sales, sales per customer, revenues, and cents per KWh normalized for weather.

(b) Please provide the working papers that were used to do the weather normalization, and the supporting analysis and data.

CW-YEC-03

Issue: Sales Forecasts – Wholesale Sales to ATCO Electric Yukon (AEY).

Reference: 2021 General Rate Application, page 2-5 (PDF page 30 of 441)

Preamble: YEC discusses its determination of its forecast sales to AEY on page 30.

Request:

(a) On lines 15-16, YEC discusses the AEY Fish Lake Generation Facility (AEY Facility). Please provide the maximum capacity of the AEY Facility, and the annual production, on a normalized and actual basis for 2018 and 2019.

(b) Please fully explain how the AEY Facility is used in providing service. Is it the first resource that is engaged, or does it only provide peak supply?

(c) On lines 18-19 YEC discusses multi-variate regression assessments of wholesale changes at normal weather conditions. Please provide the multi-variate analysis in Excel format. In the response, please also provide the source of all supporting data.

(d) Please provide the calculation of normal weather.

(e) On lines 19-20, YEC discusses Micro Generation. CW also notes footnote 4. Please provide:

i. The detailed analysis of the source of the 1.5 GWh forecast for 2021.

ii. The impact of the AEY Facility on peak demand.

CW-YEC-04

Issue: Sales Forecasts – Wholesale Sales to ATCO Electric Yukon (AEY).

Reference: 2021 General Rate Application, page 2-6 (PDF page 31 of 441)

Preamble: On lines 1-3, YEC discusses the AEY forecast for 2021.

Request:

(a) Please provide copies of all communication between AEY and YEC regarding the 2020 and 2021 forecast wholesale sales.

(b) Please provide a calculation of the impact on customer rates if the AEY forecast of 345.9 GW.h were used for 2021.

CW-YEC-05

Issue: Sales Forecasts – Major Industrial.

Reference: 2021 General Rate Application, page 2-6 (PDF page 31 of 441)

Preamble: CW notes that YEC discusses its industrial sales forecasts, and also notes footnotes 5, 6, and 7.

Request:

(a) For each industrial customer, please fully discuss all communication with the customer regarding load projections and potential changes in load for 2021,

(b) Please provide copies of the Power Purchase Agreement referenced in Footnote 6.

CW-YEC-06

Issue: Sales Forecasts – Residential Sales.

Reference: 2021 General Rate Application, page 2-7 (PDF page 32 of 441)

Preamble: YEC provides one paragraph explaining its residential sales forecast.

Request:

(a) Please provide the monthly actual and normal sales, monthly actual and normal sales per customer, and monthly customers for each community for 2015, 2016, 2017, 2018, and 2019 in Excel format.

(b) Please provide an explanation for changes in use per customer and number of customers in each community.

(c) Please provide the forecast sales, sales per customer, and customers for each community for 2020 and 2021 in excel format.

(d) Please provide the calculation of historical averages referred to in line 18,

(e) Please provide the actual and normal weather (Temperatures and degree days) by month for each community.

(f) Please YEC's definition of normal weather, and the calculation of normal weather for each month for each community.

CW-YEC-07

Issue: Sales Forecasts – General Service Sales.

Reference: 2021 General Rate Application, page 2-7 (PDF page 32 of 441)

Preamble: YEC provides one paragraph explaining its General Service sales forecast in general and one discussing Faro Mine remediation.

Request:

(a) Please provide the monthly actual and normal sales, monthly actual and normal sales per customer, and monthly customers for each community for 2015, 2016, 2017, 2018, and 2019 in Excel format.

(b) Please provide an explanation for changes in use per customer and number of customers in each community.

(c) Please provide the forecast sales, sales per customer, and customers for each community for 2020 and 2021 in Excel format.

(d) Please provide the calculation of historical averages referred to in lines 23-24.

(e) If different than residential, please provide the actual and normal weather (Temperatures and degree days) by month for each community.

(f) If different than for residential, please YEC's definition of normal weather, and the calculation of normal weather for each month for each community.

CW-YEC-08

Issue: Sales Forecasts – General Service Sales – Faro Mine remediation.

Reference: 2021 General Rate Application, page 2-7 (PDF page 32 of 441);

Preamble: YEC provides one paragraph explaining its General Service sales forecast in general and one discussing Faro Mine remediation.

Request:

(a) Please provide the referenced "forecasts provided to Yukon Energy by the customer, the Government of Canada". In the response please fully explain any efforts undertaken by YEC to vet or validate the forecasts.

CW-YEC-09

Issue: Power Generation

Reference: 2021 General Rate Application, page 2-9 (PDF page 34 of 441) and Table 2.2

Preamble: CW notes that there is a pattern of increased thermal generation in 2019 and 2020, but this is forecast to decline in 2021. Further, CW notes that the LTA predicts a higher use of thermal. CW requires information as to how the different forecasts would impact customers.

The following table is taken from data in Table 2.2

	2018 Approved	2018 Actual	2019 Actual	2020 Forecast	Forecast 2021
Actual					
Hydro Generation	411,397	413,052	370,819	436,725	506,483
Wind Generation	0	0	0	0	0
IPP Generation	0	0	0	56	1,983
Thermal Generation	11,109	37,316	69,858	71,199	30,260
Total Actual Generation	422,506	450,368	440,676	507,980	538,726
Total Sales	388,332	412,470	403,492	465,788	495,151
Losses	34,173	37,898	37,185	42,193	43,575
	422,506	450,368	440,676	507,980	538,726
LTA					
LTA Hydro Generation	403,910	418,695	415,377	438,905	452,437
LTA Wind Generation	0	0	0	0	0
IPP Generation	0	0	0	56	1,983
LTA Thermal Generation	16,355	31,391	25,300	69,019	84,306
Total LTA Generation	420,265	450,086	440,676	507,980	538,726
Actual					
Hydro Generation	97.37%	91.71%	84.15%	85.97%	94.01%
Wind Generation	0.00%	0.00%	0.00%	0.00%	0.00%
IPP Generation	0.00%	0.00%	0.00%	0.01%	0.37%
Thermal Generation	2.63%	8.29%	15.85%	14.02%	5.62%
Total Actual Generation	100.00%	100.00%	100.00%	100.00%	100.00%
LTA					
LTA Hydro Generation	96.11%	93.03%	94.26%	86.40%	83.98%
LTA Wind Generation	0.00%	0.00%	0.00%	0.00%	0.00%
IPP Generation	0.00%	0.00%	0.00%	0.01%	0.37%
LTA Thermal Generation	3.89%	6.97%	5.74%	13.59%	15.65%
Total LTA Generation	100.00%	100.00%	100.00%	100.00%	100.00%

Request:

(a) Please fully explain why the LTA forecasts were not used in the preparation of the GRA forecast.

(b) Please explain the impact of a scenario where the actual is closer to the LTA, yet the GRA forecast is approved. What will the impact be on the various deferral accounts and on base rates?

(c) CW notes that on lines 21-26 of page 2-9, CW briefly discusses its sourcing strategy. This addresses years with normal water conditions. Please fully explain the YEC strategy for sourcing energy in years that do not have normal water conditions. What assets are engaged first, second, third, etc. Why is this the appropriate strategy?

(d) On lines 17-20 of page 2-9, YEC discusses that 2018 and 2019 experienced unfavourable water conditions, and that actual hydro generation is currently forecast to reflect water availability at about LTA in 2020 and above LTA in 2021. Please fully explain the current water levels, and the likelihood that the GRA forecast generation mix will be achieved.

CW-YEC-10

Issue: Resource Plan

Reference: 2021 General Rate Application, page 2-14 (PDF page 39 of 441)

Preamble: On lines 5-8. YEC discusses a 2016 resource plan that was used in the 2017-18 GRA. CW requires information regarding how the 2016, or subsequent, resource plan was used in the preparation of this GRA.

Request:

(a) Please confirm that there is no newer resource plan that was prepared by YEC subsequent to the referenced 2016 Resource Plan.. If not confirmed, please provide the most recent resource plan.

(b) Please fully discuss how the 2016 (or more recent) resource plan was used in the preparation of this GRA.

CW-YEC-11

Issue: Long-Term Average Hydro Generation (2021)

Reference: 2021 General Rate Application, Appendix 2.1, Table 2.1-1

Preamble: In Appendix 2.1, YEC discusses its LTA forecasts. CW requires information to assess the LTA and how it is used.

Request:

(a) Please provide the year that each line number in Table 2.1-1 relates to. In the response, please also provide Table 2.1-1 in Excel format.

(b) Please confirm that the LTA is a simple average of years. If not confirmed, please fully explain.

(c) If (b) above is confirmed, please fully discuss whether any trend or regression analysis was conducted on the LTA data. If any such analysis was conducted, please provide it.

CW-YEC-12

Issue: Fuel Costs

Reference: 2021 General Rate Application, Table 3.2.1 and Table 2.2

Preamble: In Table 2.2, it appears that the forecast 2021 generation is based on a forecast that is different than the LTA, yet in Table 3.2.1, it appears that the fuel costs are based on LTA thermal generation. The following table taken from Table 2.2 demonstrates the difference between the 2021 forecast and the LTA.

	2018 Approved	2018 Actual	2019 Actual	2020 Forecast	Forecast 2021
Actual					
Hydro Generation	411,397	413,052	370,819	436,725	506,483
Wind Generation	0	0	0	0	0
IPP Generation	0	0	0	56	1,983
Thermal Generation	11,109	37,316	69,858	71,199	30,260
Total Actual Generation	422,506	450,368	440,676	507,980	538,726
Total Sales	388,332	412,470	403,492	465,788	495,151
Losses	34,173	37,898	37,185	42,193	43,575
	422,506	450,368	440,676	507,980	538,726
LTA					
LTA Hydro Generation	403,910	418,695	415,377	438,905	452,437
LTA Wind Generation	0	0	0	0	0
IPP Generation	0	0	0	56	1,983
LTA Thermal Generation	16,355	31,391	25,300	69,019	84,306
Total LTA Generation	420,265	450,086	440,676	507,980	538,726
Actual					
Hydro Generation	97.37%	91.71%	84.15%	85.97%	94.01%
Wind Generation	0.00%	0.00%	0.00%	0.00%	0.00%
IPP Generation	0.00%	0.00%	0.00%	0.01%	0.37%
Thermal Generation	2.63%	8.29%	15.85%	14.02%	5.62%
Total Actual Generation	100.00%	100.00%	100.00%	100.00%	100.00%
LTA					
LTA Hydro Generation	96.11%	93.03%	94.26%	86.40%	83.98%
LTA Wind Generation	0.00%	0.00%	0.00%	0.00%	0.00%
IPP Generation	0.00%	0.00%	0.00%	0.01%	0.37%
LTA Thermal Generation	3.89%	6.97%	5.74%	13.59%	15.65%
Total LTA Generation	100.00%	100.00%	100.00%	100.00%	100.00%

Request:

(a) Please fully explain and reconcile the apparent discrepancy.

(b) Please provide an adjusted fuel cost forecast using the generation mix incorporated in the 2021 forecast in Table 2.2.

CW-YEC-13

Issue: Labour

Reference: 2021 General Rate Application, page 3-8 and 3-9 (PDF pages 54-55) and Table 3.4

Preamble: On page 3-9 YEC provides a discussion of reasons for increases in labour. In Table 3.4, YEC provides a summary of employment history. On lines 11-13 of page 3-8, YEC discusses overtime, vacancies and capital allocation. CW requires information to analyse the employment levels and verify the assertions of the causes of increases in headcount.

Request:

(a) Please fully explain whether the headcount in Table 3.4 is total complement, O&M only, includes vacancies or excludes vacancies, and whether it includes or excludes allocations to capital.

(b) Please provide the calculation of total headcount, allocations to capital, and vacancies arriving at total O&M headcount, net of vacancies, in a form similar to Table 3.4, and in Excel format.

(c) Please provide an analysis that lists the positions that directly work in:

i. Reading meters;

ii. Maintaining and operating assets;

iii. Customer billing and responding to customer calls;

iv. Providing customer service in the field;

v. Transmission;

vi. Generation; and

vii. Other administrative functions.

(d) For each of the positions listed in the response to (c) above for please provide the headcount for each YEC community in Excel format for each of:

i. 2018 Approved;

ii. 2018 Actual;

iii. 2019 Actual;

iv. 2020 Forecast; and

v. Proposed 2021

Please ensure that the total reconciles to the totals related to O&M as provided in response to (b) above. Where a position provides a number of the functions listed in (c) above, please allocate the headcount between the functions, and provide an explanation of the allocation.

(e) Please provide total customers by community and by customer class for each of:

i. 2018 Approved;

ii. 2018 Actual;

iii. 2019 Actual;

iv. 2020 Forecast; and

v. Proposed 2021.

(f) Please provide the kilometres of line, number of transformers, number of meters, number of substations, number of poles, number of towers, and number of generation assets by community and/or location of facility for each of:

i. 2018 Approved;

ii. 2018 Actual;

iii. 2019 Actual;

iv. 2020 Forecast; and

v. Proposed 2021

CW-YEC-14

Issue: Labour

Reference: 2021 General Rate Application, page 3-8 (PDF page 54) and Table 3.4

Preamble: On page 3-8 YEC provides a discussion of reasons for increases in labour. On lines 11-13 of page 3-8, YEC mentions overtime, vacancies and capital allocation. In Table 3.4, YEC provides total labour. CW requires information to analyse the employment levels and verify the assertions of the causes of increases in headcount.

Request:

(a) Please provide the total Labour provided in Table 3.4 separating base labour, overtime, benefit costs and incentive compensation.

(b) For each new position where YEC asserts that the increased position is needed as a result of overtime, please provide an analysis that clearly demonstrates that there was a pattern of overtime, and that there is a reduction in overtime that is included in the forecast for 2021 to offset that new position.

CW-YEC-15

Issue: Labour

Reference: 2021 General Rate Application, page 3-10 (PDF page 56)

Preamble: On line 21, YEC discusses an increase related to a meter reader. CW requires information to assess efforts to improve productivity.

Request:

(a) Please fully discuss all research, analysis or other investigations that YEC has done in the areas of Automated Meter Reading (AMR) or Advanced Metering Infrastructure (AMI). In the response please fully discuss any plans YEC has to implement AMR or AMI, and the timeframes for any implementation. If YEC is not planning on implementing any AMR or AMI technology please fully explain why not, and provide all economic analysis that YEC has performed related to AMR or AMI.

CW-YEC-16

Issue: Labour Rates.

Reference: 2021 General Rate Application, page 3-8 (PDF page 54)

Preamble: In lines 2-8, YEC states:

> Labour Rates – This includes factors such as base pay, benefit cost, annual increments (performance increments, cost of living adjustments), etc. This is heavily influenced by collective bargaining agreements (CBA). The last settled CBA covered fiscal periods 2017 to 2019 inclusive; the actual annual negotiated increase in base pay from 2018 to 2019 was 2.0%. To date, the CBA has not been settled for fiscal periods 2020 and 2021; an arbitration hearing is scheduled for April 2021. Forecast 2020 and 2021 labour rates include estimated economic increments of 2%; these estimates were developed by YEC management based on prior settlements.

CW requires information to understand how increases have been applied.

Request:

(a) Please provide a working paper that identifies the cost of living adjustment, performance increments and any other adjustments for each of:

i. 2018 Approved;

ii. 2018 Actual;

iii. 2019 Actual;

iv. 2020 Forecast; and

v. Proposed 2021.

(b) Please fully discuss the increases awarded to employees not subject to the CBA.

CW-YEC-17

Issue: Production

Reference: 2021 General Rate Application, Section 3.3.2, and Table 3.5

Preamble: On lines 4-8 of page 3-14, YEC discusses diesel rentals, and an increase of $3.834 million.

Request:

(a) Please provide copies of all analysis or business cases that YEC has done or prepared comparing the cost of owning diesel generation compared to rentals. If no such analysis or business cases have been prepared, please fully explain why not.

(b) Please provide the number of diesel generation units that would be rented, and the amount of use each would experience (Months per year).

(c) Please describe the rental terms. As an example, are the units rented on a month to month basis or on an annual basis? In the response, please provide an analysis that clearly identifies the number of months of rental payments YEC has forecast for each unit it is renting in 2021. Also, are the rentals under long term leases, or can the rental be cancelled with 30 days notice or no notice at all?

(d) Please provide the capacity of each unit.

(e) Please explain what operating costs YEC is responsible for, compared to the costs the lessor is responsible for.

(f) Please describe the characteristics of each unit, for example, are the all the units mobile or are any fixed in place?

(g) Please provide YEC's estimated cost of purchasing each rental unit that is forecast to be rented in 2021.

CW-YEC-18

Issue: Brushing Costs

Reference: 2021 General Rate Application, page 3-15 (PDF page 61) Table 3.6.1 and following paragraph.

Preamble: CW notes that YEC discusses brushing and its related policy. Also, CW notes that there appears to be a marked reduction in costs in 2019 for distribution. CW is concerned that there be no arbitrary reductions in brushing to maintain corporate profits.

Request:

(a) Please fully explain the YEC brushing policy, and how the 2019 actual Distribution brushing expenditure was consistent with the policy.

(b) CW notes that the 2019 actual Distribution brushing was only $28,000. Please fully explain why the 2019 Distribution Brushing was so low. In the response please also confirm that YEC follows its brushing policy, and does not reduce brushing to avoid costs and maintain returns. If not confirmed, please fully explain.

CW-YEC-19

Issue: Distribution Costs

Reference: 2021 General Rate Application, page 3-16 (PDF page 62) Table 3.7 and following paragraph.

Preamble: CW notes that YEC has forecast "Other Non-Labour" to increase from $204,000 in the 2018 approved forecast to $279,000 in 2021. This is an increase of approximately 37%.

Request:

(a) Please fully explain why "Other Non-Labour" reduced to $80,000 in 2019. In the response, please fully explain why that level of costs could not be maintained in 2021.

(b) Please fully explain what costs are included in "Other Non-Labour" and why the forecast increased by 37% from 2018 to 2021.

CW-YEC-20

Issue: General Operating and Maintenance

Reference: 2021 General Rate Application, pages 3-16 and 3-17 (PDF pages 62 and 63) Table 3.8 and following paragraph.

Preamble: In the paragraph following Table 3.8, YEC explains what areas the cost increases are in, but now why the costs increase.

Request:

(a) Please fully explain why costs related to Transportation, Maintenance of Company Owned Properties, and Scada Communication are forecast to increase by 10%, 18%, and 15% respectively.

CW-YEC-21

Issue: Administration

Reference: 2021 General Rate Application, pages 3-17 and 3-18 (PDF pages 63 and 64) Table 3.9 and following paragraph.

Preamble: YEC discusses changes in Administration costs.

Request:

(a) On lines 1-5 of page 3-18, YEC discusses cost increases due to a 3 year water license. Please provide the term of the referenced license (i.e. what years are covered by the license).

CW-YEC-22

Issue: LWRF Stabilization Mechanism

Reference: 2021 General Rate Application, page 3-31 (PDF page 77)

Preamble: On lines 11-19, YEC discusses why it has not updated its LWRF Term Sheet.

Request:

(a) Please fully explain what COVID conditions prevented the completion of an updated term sheet.

(b) Please fully explain what other factors prevented the completion of the updated term sheet.

(c) Please fully explain when YEC expects to complete an updated term sheet.

(d) Please fully explain why YEC did not file to be given relief from filing an updated term sheet.

CW-YEC-23

Issue: Timing of Rate Increases.

Reference: 2021 General Rate Application Introduction, page 2 (PDF page 3)

Preamble: YEC states that it proposes to implement interim rates on July 1, to coincide with the expected reduction in Rider F. Further, YEC proposes to implement final rates on December 1 to coincide with the removal of Rider J1

Request:

(a) Please provide a detailed analysis of Rider F, and the expected rate for July 1, 2021.

(b) Please provide the current Rider F.

(c) Please fully explain why Rider J1 is still being used in 2021, some 3 years after the last test period.

(d) Please confirm that Rider F could increase in the future, depending on fuel prices. If not confirmed, please fully explain.

CW-YEC-24

Issue: Depreciation

Reference: 2021 General Rate Application, page 3-22 (PDF page 68), Alliance Consulting Group Depreciation Study, PDF pages 241, 249, and 250.

Preamble: On lines 18-21 of page 3-22, YEC states:

> Forecast "Existing" fixed asset depreciation expense in 2021 of $12.945 million (as compared to $12.196 million in 2018 approved), reflects changes in the assets in service. Forecast "Proposed" fixed asset depreciation expense in 2021 of $13.581 million also reflects changes resulting from the depreciation study.

On PDF page 241, Alliance Consulting Group states:

> The term "depreciation" as used in this study is considered in the accounting sense, that is, a system of accounting that distributes the cost of assets, **less net salvage (if any)**, over the estimated useful life of the assets in a systematic and rational manner. It is a process of allocation, not valuation. This expense is systematically allocated to accounting periods over the life of the properties. The amount allocated to any one accounting period does not necessarily represent the loss or decrease in value that will occur during that particular period. The Company accrues depreciation on the basis of the original cost of all depreciable property included in each functional property group. On retirement the full cost of depreciable property, less the net salvage value, is charged to the depreciation reserve.

On PDF page 249, Alliance Consulting Group states no net salvage analysis was performed.

On PDF page 250, Alliance Consulting Group provides a flowchart of the process.

Request:

(a) Please fully explain why no net salvage analysis was performed. In the response please fully explain how any actual net salvage is treated in YEC asset accounts, and how it was dealt with in the Alliance Consulting Group study.

(b) Please confirm that the difference between $12.945 million in 2021 based on existing rates and $13.581 million on proposed rates is solely due to the impact of the Alliance Consulting Group depreciation study. If not confirmed, please fully explain.

(c) Please provide an analysis that separates the impact of (i) changes in lives, (ii) amortization of reserve differences, (iii) any consideration of net salvage, and (iv) other. For any other, please fully explain what it is.

(d) Please fully discuss all life extension efforts or initiatives that YEC:

i. Is considering;
ii. Is planning on implementing after the test period;
iii. Is planning on implementing in the test period; or
iv. Has implemented prior to 2021.

In the response please fully explain the costs of each initiative, and the expected impact, including lengthening service lives, and impact on reduced depreciation.

(e) If there are no life extension efforts or initiatives, please fully explain why not.

CW-YEC-25

Issue: Rate Relief

Reference: https://globalnews.ca/news/7584771/altalink-alberta-refund

Preamble: In Alberta, AltaLink has proposed to refund over collected depreciation and future income taxes in an effort to provide rate relief to customers. CW understands that YEC, as a crown corporation will not have any income taxes. Having said that, CW is interested in understanding what efforts YEC has undertaken to identify and implement measures that would provide rate relief to customers.

Request:

(a) Please fully discuss and provide copies of any and all research YEC has conducted into ways to provide rate relief to customers, including, but not limited to extending service lives for utility assets.

CW-YEC-26

Issue: LNG Third Engine/ Critical Spares

Reference: 2021 General Rate Application, page 5-8 (PDF page 121)

Preamble: On lines 5-6 of page 5-8, YEC states, with respect to the Faro Thermal Rental Site Infrastructure project, "[t]he project is expected to be completed in 2020 at an estimated budget of $2.037 million. The project is on track for a mid-November 2020 in service date."

Request:

(a) Please confirm that the project is complete. If not please provide the estimated completion date.

(b) Please provide the actual cost of the project, and an explanation of any variances.

CW-YEC-27

Issue: Mayo – McQuesten Transmission Line Upgrade

Reference: 2021 General Rate Application, Section 5.2.1.3

Preamble: On line 11 of page 5-9 (Pdf page 122), YEC indicates this project was reviewed in the 2017/18 GRA. In Table 5.2.1-2, YEC provides project costs and contributions.

Request:

(a) Please provide specific reference to where this project was approved in the 2017/18 GRA.

(b) Please provide the cost estimates that were reviewed and approved in the 2017/18 GRA.

(c) Please provide a variance analysis comparing the cost estimates approved in the 2017/18 GRA to the forecast costs included in Table 5.2.1-2. In the response please provide explanations for all material variances.

CW-YEC-28

Issue: Transmission Line Refurbishment

Reference: 2021 General Rate Application, Section 5.2.1.5

Preamble: On lines 2-4 of page 5-15 (PDF page 128), YEC states "[t]he Transmission and Distribution Line replacement project was initially reviewed as part of the 2017/18 GRA; and project components were capitalized as completed and placed into service, with approved costs forecast to the end of 2018 included in ratebase." CW requires information to understand the prudence of the investment.

Request:

(a) Please provide an analysis that compares approved costs and actual costs with explanations of significant variances.

(b) Please provide an analysis that compares the approved assets and components to be replaced with the actual assets and components that were replaced.

CW-YEC-29

Issue: Transmission Line Refurbishment – L178

Reference: 2021 General Rate Application, Section 5.2.1.6

Preamble: On line 12 of page 5-15 (PDF page 128), YEC states "[t]he final phase of the Transmission Line Refurbishment Project will commence in 2021"

Request:

(a) Please provide evidence from the 2017/18 GRA that clearly demonstrates that this component of the line was NOT included in the costs approved in the 2017/18 GRA.

CW-YEC-30

Issue: Breaker Replacement Program

Reference: 2021 General Rate Application, Section 5.2.1.7

Preamble: On line 12 of page 5-16 (PDF page 129), YEC states the project "was reviewed as part of the 2017/18 GRA"

Request:

(a) Please provide an analysis that compares approved costs and actual costs with explanations of significant variances.

CW-YEC-31

Issue: Replacement of P125 Head Gate

Reference: 2021 General Rate Application, Section 5.2.1.8

Preamble: On page 5-18 (PDF page 131), YEC states "[i]t is expected that the WH2 headgate will be completed in 2020 at a forecast cost of $2.3 million; and that the WH1 and WH3 headgates will be completed in 2021 at a forecast cost of $3.5 million."

Request:

(a) Please provide the status of the WH2 headgate. Is the project complete, and what is the actual cost?

(b) Please provide the status of the 2021 project.

CW-YEC-32

Issue: WH2 Uprate

Reference: 2021 General Rate Application, Section 5.2.1.9

Preamble: On line 19 of page 5-18, YEC refers to the 2016 Resource Plan. On lines 23-27 of page 5-18 (PDF page 131), YEC states:

> In 2017, Hatch completed an economic assessment of various uprate options at the Whitehorse Rapids Generating Station (WRGS). The report concluded that the uprating of the WH1 or WH2 units would be the most cost-effective option and provide the best payback of the WRGS hydro units. Management selected the uprating of WH2 over WH1 since there are existing known issues with the WH2 governor, and the uprating project would resolve these issues.

CW requires information to understand what was approved compared to what was actually implemented.

Request:

(a) Please provide the evidence from the 2017/18 GRA, and related decision sections, that clearly indicate what was requested and approved in the 2017/18 GRA.

(b) Please provide an analysis of the forecast and approved costs from the 2017/18 GRA compared to the actual costs incurred for 2017, 2018, and 2019 with variances explained.

CW-YEC-33

Issue: WH2 Uprate

Reference: 2021 General Rate Application, Section 5.2.1.9

Preamble: In lines 28-30 of page 5-18 (PDF page 131), YEC states:

> The project is planned to be implemented over a three year period (2019-21), and is expected to add 6.4 GWh/yr additional hydraulic generation to the grid [starting in the third quarter of 2021]. The project is also expected to increase dependable capacity of WH2 by 0.94 MW.

CW requires information to understand how distributed energy was factored into the need for a capacity increase.

Request:

(a) Please provide a copy of the business case for the project. In the response please provide specific references to how YEC considered the implementation and use of distributed and micro generation over the life of the asset.

CW-YEC-34

Issue: Demand Side Management (DSM)

Reference: 2021 General Rate Application, Section 5.3.1.2

Preamble: On lines 1-2 of page 5-23 (PDF page 136), YEC states "[t]he 2016 Resource Plan determined that DSM programs are a cost-effective way to meet energy and capacity demand that should be included in the proposed future portfolio of energy supply projects." Pursuant to government direction, YEC has included DSM costs. CW requires information to assess how DSM benefits have been factored into YEC cost forecasts.

Request:

(a) Please provide a copy of all research, studies, business cases, and other analysis that YEC has conducted that demonstrates DSM is "a cost-effective way to meet energy and capacity demand."

(b) Please provide an analysis that demonstrates how DSM will reduce the need for incremental assets and capacity over the next 40 years.

(c) Please fully explain how YEC has factored the potential benefits of DSM into **each** capital project that results in increased capacity of the asset or system.

CW-YEC-35

Issue: Investments to Ensure Dependable Capacity

Reference: 2021 General Rate Application, Appendix 5-1, Section 5.1-2

Preamble: YEC proposes to spend $25,000,000 in 2021 (with a $16,500,000 contribution) on a Battery Energy Storage System.

Request:

(a) Please provide a full business case for the Battery Energy Storage System.

(b) Please provide a detailed analysis that clearly demonstrates how the inclusion of a Battery Energy Storage System was considered in determining the need for **each** capital project that results in increased capacity of the asset or system.

CW-YEC-36

Issue: Investments to Ensure Dependable Capacity

Reference: 2021 General Rate Application, Appendix 5.1, Section 5.1-2, page 5.1-7 (PDF page 164)

Preamble: YEC proposes to spend $3,000,000 on a "Whitehorse Interconnection." In the explanation YEC discusses a 10-year Renewable Energy Plan and a number of new projects being planned over the next decade.

Request:

(a) Please provide a copy of the 10-year Renewable Energy Plan.

(b) Please provide a list of the "number of new projects being planned over the next decade." In the response, please provide YEC's assessment of the probability of each project proceeding.

CW-YEC-37

Issue: Diesel Retirement Replacement

Reference: 2021 General Rate Application, Appendix 5-3, Section 5.3-1

Preamble: On page 5.3-3 (PDF page 181), YEC discusses diesel replacement.

Request:

(a) Please provide the business case that identifies all the options or alternatives considered and a detailed analysis of the costs of replacement compared to each of the options considered. In the response, please provide the costs of each unit included in the proposal, and the total cost or the project.

(b) Please fully discuss how YEC considers total life cycle cost of the alternatives in its business case.

(c) Please provide the expected life of each unit.

CW-YEC-38

Issue: Southern Lakes Enhanced Storage

Reference: 2021 General Rate Application, Appendix 5-3, Section 5.3-1

Preamble: On page 5.3-4 (PDF page 182), YEC discusses Southern Lakes Enhanced Storage.

Request:

(a) Please provide a detailed analysis that clearly demonstrates how the Southern Lakes Enhanced Storage project was considered in determining the need for each capital project that results in increased capacity of the asset or system.

CW-YEC-39

Issue: EV Infrastructure Project

Reference: 2021 General Rate Application, Appendix 5-5

Preamble: On PDF page 194, YEC discusses an EV Infrastructure Project.

Request:

(a) Please fully discuss and explain who (shareholder or customer) would bear the risk if there is not sufficient EV usage to warrant EV stations.

(b) Please fully explain YEC's position as to whether EV stations should be owned and operated by independent competitive entities or by regulated utilities.

CW-YEC-40

Issue: Board Directions

Reference: 2021 General Rate Application, Tab 6.0

Preamble: On PDF page 198, YEC discusses Cost of Service (COS) studies and rate design. On lines 15-19, YEC states:

> The latest Order in Council (OIC) direction provided in December 2018 (OIC 2018/220) provides that material rate design changes that would result in rebalancing of rates between different customer classes cannot be undertaken at this time. The remaining outstanding directives in Order 2010-13 will be addressed in the next joint cost of service and rate design application. This includes directives #1 to #12 and #19 (as summarized in Tab 6 of the 2012/13 GRA filing).

Request:

(a) Please fully discuss and explain all conversations, communications, and correspondence YEC has had with its Shareholder, about why a COS proceeding and rate rebalancing may in fact be appropriate.

CW-YEC-41

Issue: Directive #463 – Battery Project

Reference: 2021 General Rate Application, Tab 6.1.5

Preamble: On PDF page 207, YEC notes that the Board did not approve a battery project, yet YEC proceeded with a project, based on receiving grants for the project.

Request:

(a) Please fully explain YEC's position on who bears the risk if the project does not produce benefits or proves to be unviable. Would that be written off to the shareholder or included in future rates?

CW-YEC-42

Issue: Depreciation Study

Reference: 2021 General Rate Application, Tab 9 Depreciation Study

Preamble: On PDF page 246, The Alliance Consulting Group states:

> At the request of Yukon Energy, this study continues to use the ALG depreciation procedure to group the assets within each account. In its last depreciation study, Yukon Energy was authorized to use the average life group, whole life ("ALG-WL") depreciation procedure. This study continues to use the ALG depreciation procedure to group the assets within each account.

Request:

(a) Please fully explain all methods that are accepted by depreciation experts, including the ELG method. In the response, please provide the advantages and disadvantages of each.

(b) Please fully explain the impact on depreciation rates if the ELG were used. Would lives tend to lengthen or shorten?

(c) Please provide a full discussion of The Alliance Consulting Group's experience as to which depreciation method is most commonly used.

(d) Does The Alliance Consulting Group support the ALG method or would it prefer some other method like the ELG method?

(e) Please fully explain whether The Alliance Consulting Group recommended a different method to YEC. Please fully explain the process for the selection of the ALG.

(f) Please provide the retainer letter or other engagement documents that govern the relationship between YEC and The Alliance Consulting Group.

(g) Please fully explain any ways that The Alliance Consulting Group could support that would lengthen lives and reduce customer rates.

CW-YEC-43

Issue: Secondary Sales

Reference: 2021 General Rate Application, Table 2.1, 2.2 and Section 2.2.4 and Section 2.3.1

Preamble: In Tables 2.1 and 2.2, YEC forecasts 0 for secondary sales related to Generation for 2021. On page 2-8 (PDF page 33 of 441), lines 9-14, YEC states

> Due to the lack of surplus hydro generation available resulting from below average water conditions and growth of firm load, secondary sales ceased in September 2018. Secondary sales were 258 MW.h in 2018 (compared with 2,059 MW.h forecast in the 2018 Compliance Filing) and 0 MW.h in 2019. Secondary sales were forecast at 0 MW.h sales in 2020 and 2021 when the 2021 GRA load forecast was prepared. YEC will update 2021 test year forecasts in the compliance filing if any secondary sales are expected to occur in 2021 as a result of surplus water availability.

On page 2-9 (PDF page 34 of 441) at line 19, YEC states "[a]ctual hydro generation is currently forecast to reflect water availability at about LTA in 2020, and water availability above LTA in 2021."

CW would like to understand the correlation between surplus water and secondary sales.

Request:

(a) Please provide an analysis that compares water levels and secondary sales for each of the last 10 years.

(b) Please fully explain the relationship between water levels and secondary sales.

(c) Please explain what YEC means by stating that 2021 water levels will be above LTA.