

**Yukon Electrical Corporation (“YEC”)  
2017-2018 General Rate Application (“GRA”) Phase I**

**Information Request No. 1 from the City of Whitehorse (“CW”) to  
Yukon Electrical Corporation (“YEC”)  
August 25, 2017**

---

**CW-YEC-01**

**Issue:** Yukon Energy 2016 Resource Plan (Resource Plan)

**Reference:** Resource Plan, page 1, lines 7-11, YEC Application, page 8

**Preamble:** In the Resource Plan, YEC states:

A key component of the 2016 Resource Plan (the Plan) is a recommended Action Plan for meeting customer electricity demands. **The document does not seek approval for specific future projects.** While the Plan identifies resources of interest, the development of future resources will be managed through YEC’s stagegate process for project development and approval, and will require engagement with First Nations and stakeholders, as well as regulatory reviews and permitting. (Emphasis added)

On page 8 of its Application, YEC states:

Yukon Energy has provided as Volume 2 of its filed material the final 2016 Resource Plan. The 2016 Resource Plan addresses Yukon Energy’s requirements for the next five years, as well as for the longer term planning horizon, and describes the extensive consultation undertaken during the preparation of this plan. Yukon Energy is not seeking specific approvals for the plan. The 2016 Resource Plan is provided for information of the Board and stakeholders and to provide context for capital expenditures and ongoing planning costs included in the test year forecasts.

CW requires information to understand the use of the Resource Plan

**Request:**

- (a) Please fully explain how the resource plan was used to create the GRA forecasts. Were projects in the resource plan specifically included in the GRA?

- (b) In the response to (b) above, please provide a cross reference between any projects in the GRA, and projects in the resource plan.

**CW-YEC-02**

**Issue:** Yukon Energy 2016 Resource Plan (Resource Plan)

**Reference:** Resource Plan, page 1, lines 2-6

**Preamble:** On page 1 of the Resource Plan, YEC states

Yukon Energy Corporation (YEC) prepares an update to its 20-Year Resource Plan every five years. The following document is an update of the 2006 and 2011 Plans. The purpose of this plan is to provide recommendations as to how to cost-effectively meet the electricity needs of the Yukon Energy's customers over the next 20 years. Consistent with the values of these customers, environmental protection and low cost were key drivers in shaping the recommendations of this plan.

CW requires information to assess the accuracy of Resource Plans in forecasting needs.

**Request:**

- (a) Please provide copies of 2006 and 2011 plans.
- (b) Please provide tables of annual sales forecasts for the 20 year period for each of the plans.
- (c) Please provide actual annual sales for each year from 2006-2016.
- (d) Please provide a table of peak load forecasts for the 20 year period for each of the plans.
- (e) Please provide the actual peak load for each year from 2006-2016
- (f) Please provide a comparison of the proposed projects in each of the plans to the actual projects completed in the 2006-2016 time period. In the response, please explain variances between proposed and actual projects.
- (g) Please confirm that YEC facility planning is based on this resource plan. If not confirm please fully explain.

**CW-YEC-03**

**Issue:** Yukon Energy 2016 Resource Plan (Resource Plan)

**Reference:** Resource Plan, page 7-3 lines 42-43 and 7-4, lines 1-5

**Preamble:** On pages 7-3 and 7-4 of the Resource Plan, YEC states

- Technological uncertainties, either due to policy changes (such as the introducing more stringent local building codes), or as-yet unanticipated developments in technology such as what has already occurred with LED lighting. The resulting risk is increased rates caused by reduced load and, consequently, reduced sales; and
- Uncertainties over distributed electrical generation technologies such as solar panels, which could lead to the risk of lower electricity demand to be serviced by YEC, or a significant change in the annual pattern of demand. The resulting risk is increased rates caused by reduced load and, consequently, reduced sales.

CW requires information to assess the risks of Resource Plans in forecasting needs.

**Request:**

- (a) Given that this is a 20 year plan, please fully discuss how the cost of any stranded assets that may arise will be treated if there is a disruptive technology change. Will customers be expected to bear the cost of stranded assets? Will the shareholders bear these costs, which ultimately makes taxpayers responsible for them? Please fully explain.

**CW-YEC-04**

**Issue:** Yukon Energy 2016 Resource Plan (Resource Plan) – Electricity and Peak Demand Forecast

**Reference:** Resource Plan page ix (PDF page 11), lines 2-4

**Preamble:** At lines 2-4, YEC states

Energy and peak demand forecasts are a critical input into YECs planning processes. The energy and peak demand forecast developed for this Resource Plan presents YEC's predicted electricity needs over the 20 year (2016 to 2035) planning period.

YEC then refers to a two stage approach, the first stage being an economic forecast for the Yukon, and the second stage, being a statistically adjusted end-use (SAE) model. As energy and peak demand forecasts are "critical inputs", the CW requires information to assess the forecasts.

**Request:**

- (a) Please provide a copy of the detailed economic and demographic model described at lines 12-13 of page ix. In the response please include all assumptions, the basis for the assumptions, and all tables in Excel format. In the response, please also include an explanation of how each formula was developed, and how it is relevant or appropriate.
- (b) Please provide a copy of the SAE model referred to at line 15 of page ix. In the response, please include explicit reference to the inputs from the economic model provided in response to (a) above. Also, in the response, please include all assumptions, the basis for the assumptions, and all tables in Excel format. In the response, please also include an explanation of how each formula was developed, and how it is relevant or appropriate
- (c) Please provide any and all analysis that demonstrates that the results of the models provided in response to (a) and (b) above are statistically valid. In the response please discuss and explain any and all statistical tests done on the models.
- (d) Please fully explain how the sales and demand forecasts developed for the Resource Plan are used in the actual GRA. In the response please provide a reconciliation between the sales and demand forecasts in the Resource Plan to the sales and demand forecasts in the GRA.

**CW-YEC-05**

**Issue:** Yukon Energy 2016 Resource Plan (Resource Plan) – Electricity and Peak Demand Forecast

**Reference:** Resource Plan page ix (PDF page 11), lines 21-27 and Chapter 4 (page 4-6, PDF 104) of the Resource Plan

**Preamble:** At lines 21-27, YEC discusses a number of scenarios it considered, and discusses “sensitivity scenarios layered on government spending and economic activity”.

CW requires information to assess the scenarios.

**Request:**

- (a) Please provide a detailed summary of each of the 10 sensitivities discussed, including key assumptions, key variables, and the impact on the sales demand forecast.
- (b) Please provide a probability assessment of the likelihood of each of the 14 scenarios and 10 sensitivities of actually occurring. In the response, please provide the basis for each probability.

**CW-YEC-06**

**Issue:** Yukon Energy 2016 Resource Plan (Resource Plan) – Electricity and Peak Demand Forecast

**Reference:** Resource Plan page 4-8 (PDF page 106), lines 11-15.

**Preamble:** At lines 11-15, YEC discusses calibration of the SAE model.

**Request:**

- (a) Please provide the results of the calibration and verification process.

**CW-YEC-07**

**Issue:** Yukon Energy 2016 Resource Plan (Resource Plan) – Electricity and Peak Demand Forecast

**Reference:** Resource Plan page ix (PDF page 11), lines 28-35

**Preamble:** At lines 28-35, YEC states “five main industrial activity scenarios were brought forward as the base scenarios throughout the rest of the Plan.”

CW requires information to assess the impact of these scenarios.

**Request:**

- (a) Please provide a probability assessment of the likelihood of each of the five main industrial activity scenarios actually occurring. In the response, please provide the basis for each probability.



**CW-YEC-08**

**Issue:** Yukon Energy 2016 Resource Plan (Resource Plan) – Portfolio Analysis

**Reference:** Resource Plan page xviii (PDF page 20), lines 21-32

**Preamble:** YEC has used a portfolio analysis to assess options to assess scenarios.

**Request:**

- (a) Please confirm that YEC uses the least cost alternative over the lifecycle of each asset. If not confirmed, please fully explain.
- (b) Please fully explain why a discount rate of 3.38% is appropriate. In the response, please fully discuss the impact of a higher discount rate on the results of the model.
- (c) Please fully discuss YEC's understanding of the appropriate discount rate from a customer perspective, i.e. what is the appropriate cost of capital for customers. In the response, please fully explain all research that YEC has done to understand what an appropriate customer discount rate would be.

**CW-YEC-09**

**Issue:** Yukon Energy 2016 Resource Plan (Resource Plan) – Transmission Considerations.

**Reference:** Resource Plan page 2-7 (PDF page 56), Section 2.6 and Section 5.2.12.

**Preamble:** YEC discusses how it is an “Islanded grid”. CW requires information to assess transmission options.

**Request:**

- (a) Please fully explain all analysis that YEC has undertaken to connect the Yukon to the British Columbia Grid. In the response, please fully explain the length of transmission line needed, and the costs of the transmission line.
- (b) Please compare the costs of constructing a transmission line to the costs of the proposed projects. In the response, please consider the potential of incremental revenue from the sales of surplus power.

**CW-YEC-10**

**Issue:** Yukon Energy 2016 Resource Plan (Resource Plan) – Capacity Deficits.

**Reference:** Resource Plan page 4-54 (PDF page 152).

**Preamble:** YEC provides a table that shows dependable capacity deficits in every year.

**Request:**

- (a) Please confirm that industrial activity is the major driver in changes in requirements, and for the construction of assets proposed in the resource plan. If not confirmed, please fully explain.
- (b) Please fully explain how the costs of new assets will be allocated between wholesale customers, YEC retail customers, and industrial customers. In particular, please confirm that any surplus capacity generated by new assets will be only allocated to industrial load, and not to wholesale load.

## **CW-YEC-11**

**Issue:**            **System Sales – Wholesale sales**

**Reference:**        YEC Application, Section 2.2.1

**Preamble:**        In section 2.2.1 of its application, YEC discusses its wholesale forecast.

### **Request:**

- (a) Please provide the latest approved GRA forecast from AEY.
- (b) At lines 6-7, on page 2-4 of its Application, YEC indicates that each year, AEY provides YEC with a forecast power purchase estimate. Please provide the latest forecast for 2017, and if available, 2018.
- (c) Please fully explain the discussions and communications between YEC and AEY regarding forecast sales and potential changes in sales levels.
- (d) On page 2-5 of its Application, at line 7, YEC discusses a multi-variable regression of wholesale sales. Please provide the regression analysis in excel format with formulae and links intact.
- (e) On lines 1-6 of page 2-5, YEC describes the increases in wholesale sales in 2015 and 2016 as slight increases over the prior year. Please provide an explanation as to why the 2015 and 2016 wholesale sales “increase slightly” over the prior year.
- (f) On lines 3-7 of page 2-6, YEC discusses the AEY forecast grid firm load and AEY forecast Fish Lake hydro generation. Please provide copies of both forecasts for 2017 and 2018.
- (g) Please provide the monthly wholesale sales for each of 2013, 2014, 2015, and 2016, as well as for 2017 year to date.
- (h) Please provide the actual and normal heating degree days by month for Whitehorse each of 2013, 2014, 2015, and 2016. In the response please indicate the determination of normal heating degree days.
- (i) Please provide the forecast heating degree days by month for Whitehorse for 2017 and 2018.

**CW-YEC-12**

**Issue:**            **System Sales – Major Industrial sales**

**Reference:**        YEC Application, Section 2.2.2

**Preamble:**        In section 2.2.2 of its application, YEC discusses its Industrial Sales forecast.

**Request:**

- (a) Please fully provide a copy of all communication between the Minto Mine and YEC related to forecast 2017 and 2018 load.
- (b) In Table 2.1 the 2016 Industrial load was 41,169 MWh compared to 2015 actual of 37,186 MWh. Please fully explain the reason for the increase.
- (c) In Table 2.1, 2017 forecast Industrial load decreases from 41,169 MWh in 2016 to 38,219 MWh in 2017. Please fully explain the decrease of 2,950 MWh (7.2%)
- (d) On page 2-8 of its Application, YEC discusses two potential sources of load, Eagle Gold and Alexco Mine. Please provide an update as to the status of these projects.

**CW-YEC-13**

**Issue:**            **System Sales – Yukon Energy Firm Retail Sales**

**Reference:**        YEC Application, Section 2.2.3 and Table 2.1

**Preamble:**        In section 2.2.3 of its application, YEC discusses its firm retail sales forecast.

**Request:**

- (a) For Residential and General Service, please provide the working papers in support of the calculation of customer forecasts. Please provide the response in Excel format with formulae and links intact.
- (b) For Residential, there is an increase in customers of 27 in 2015 and 22 in 2016. Please fully explain why there is only a forecast of 14 and 12 new customers in 2017 and 2018 respectively.
- (c) For General Service, there is an increase in customers of 5 in 2014, 6 in 2015 and 8 in 2016. Please fully explain why there is only a forecast of 1 and 0 new customers in 2017 and 2018 respectively
- (d) For Residential and General Service, please provide the working papers in support of the calculation of use per customer forecasts. Please provide the response in Excel format with formulae and links intact.

**CW-YEC-14**

**Issue:**           **System Sales – Yukon Energy Secondary Sales**

**Reference:**       YEC Application, Section 2.2.4 and Table 2.1

**Preamble:**       In section 2.2.4 of its application, YEC discusses its secondary sales forecast.

**Request:**

- (a) Please provide the calculation of the four year average for the Canada Games Centre. In the response, please provide monthly data.
- (b) Please provide the calculation of the three year average for the Yukon Hospital. In the response, please provide monthly data.
- (c) Please fully explain why 2011, 2012, 2013, and 2014 data was not used for the Yukon Hospital. Please provide monthly load data for the Yukon Hospital for each of 2011, 2012, 2013, and 2014.
- (d) Please provide actual to date, as of the end of August, 2017, sales for each of the Canada Games Centre, the Yukon Hospital, and the Yukon College.
- (e) In Table 2-1, the cents per KWh for secondary sales declines from 7.7 cents in 2016 to 5.6 cents in 2017 and 2018. Please fully explain why the rate declines. In the response please provide the actual price to the end of August, 2017, and an explanation of why the 7.7 cent amount is not appropriate for 2017 and 2018 forecasts.

**CW-YEC-15**

**Issue:**           **System Sales – Losses**

**Reference:**       YEC Application, Table 2.2

**Preamble:**       In Table 2.2 of its application, YEC calculates losses.

**Request:**

- (a) Please confirm that the entire YEC system is fully integrated. If not confirmed, please provide a loss calculation for each portion or segment of the system.



**CW-YEC-16**

**Issue:** Fuel and Purchased Power

**Reference:** YEC Application, Section 3.2 and Table 3.2

**Preamble:** In section 3.2 of its Application, YEC discusses Fuel and Purchased Power.

**Request:**

- (a) For each year in Table 3.2, please provide the working papers that convert thermal generation to Fuel costs for each type of thermal generation. In the response, include the heat rate, losses and prices of fuel that are used to convert generation to amounts of fuel and then to costs.
- (b) Please fully explain why 2014 actual fuel costs decrease from 2013 actual costs. In the response include a price and quantity variance analysis that demonstrates the impact of changing prices, and changing thermal requirements.
- (c) Please fully explain why 2015 actual fuel costs increase from 2014. In the response include a price and quantity variance analysis that demonstrates the impact of changing prices, and changing thermal requirements.
- (d) Please fully explain why 2016 actual fuel costs decrease from 2015. In the response include a price and quantity variance analysis that demonstrates the impact of changing prices, and changing thermal requirements.
- (e) Please fully explain the difference between “Existing” and “Proposed” for 2017 and 2018. In the response, please fully explain why YEC cannot apply the “Existing” forecast for proposed rates.

**CW-YEC-17**

**Issue:** Non Fuel Operating and Maintenance Expenses

**Reference:** YEC Application, Section 3.3 and Tables 3.3 - 3.4

**Preamble:** In Table 3.3, YEC provides total Labour, and in Table 3.4, YEC provides staffing. The following table, taken from YEC data provides the cost per employee.

	<u>2013 GRA compliance</u>	<u>Actual 2013</u>	<u>Actual 2014</u>	<u>Actual 2015</u>	<u>Actual 2016</u>	<u>Forecast Proposed 2017</u>	<u>Forecast Proposed 2018</u>
Labour - From Table 3.3	\$ 9,348	\$ 10,604	\$ 11,172	\$ 11,068	\$ 11,739	11,770	11,823
Staff - From Table 3.4	92.00	92.95	92.90	93.19	93.31	93.70	93.70
Cost per Employee	\$ 101,605.47	\$ 114,084.65	\$ 120,264.03	\$ 118,761.42	\$ 125,810.33	\$ 125,609.61	\$ 126,176.66

**Request:**

- (a) Please fully explain why the cost per employee declines in 2015 compared to 2014.
- (b) Please fully explain why this decline does not continue into 2016, and the test period forecasts.

## **CW-YEC-18**

**Issue:**           **Non Fuel Operating and Maintenance Expenses**

**Reference:**       YEC Application, Section 3.3 page 3-6

**Preamble:**       At lines 12-14, YEC discusses Labour Rates including such things as base pay, benefit costs annual increments (performance increments, cost of living adjustments), etc.

### **Request:**

- (a) Please provide a detailed analysis that separates base pay from incentive pay for each year in Table 3.3. Please ensure that the total equals total Labour.
- (b) Please provide the YEC incentive pay policy, and a complete analysis of the targets, thresholds and metrics used to determine incentive pay.
- (c) Please provide a detailed analysis of YEC benefits for each year in Table 3.3, with a complete explanation of all changes in benefits, with the cost of each change clearly identified. In the analysis, please explain where employee benefits are reported.
- (d) Please provide the annual cost of living increases awarded for each year in Table 3.3, on an actual basis, and forecast for the test period. Please provide the percentages for each bargaining unit, as well as out of scope staff.
- (e) Please provide the actual 2017 wage increase for each bargaining unit as well as out of scope staff.
- (f) Please provide all analysis and research YEC has conducted to demonstrate that its wages and salaries are prudent, including, but not limited to salary surveys, Statistics Canada benchmarks of average weekly earnings and inflation, or any other research YEC has conducted.

**CW-YEC-19**

**Issue:**           **Non Fuel Operating and Maintenance Expenses**

**Reference:**       YEC Application, Section 3.3 page 3-6

**Preamble:**       At lines 15-23, YEC discusses Capital/Maintenance Allocation.

**Request:**

- (a) Please provide the detailed working papers in support of the Capital/Maintenance allocation for each year in Table 3.3.
- (b) Please fully explain why the forecast ratio of 18:82 is appropriate, given the history, and forecast capital program.
- (c) Please provide the YEC Capitalization policy that is currently in place, and the one that was in place immediately prior to the current one, with any changes clearly marked and explained.

**CW-YEC-20**

**Issue:**           **Non Fuel Operating and Maintenance Expenses**

**Reference:**       YEC Application, Section 3.3 page 3-6

**Preamble:**       On page 3-6, YEC discusses the drivers for Labour. CW requires information about non-labour cost drivers.

**Request:**

- (a) Please provide all assumptions used in the derivation of non-labour forecasts. In the response please include forecasts of Whitehorse inflation, CPI, GDP, and any other assumptions that influence costs in Whitehorse.

**CW-YEC-21**

**Issue:**           **Non Fuel Operating and Maintenance Expenses**

**Reference:**       YEC Application, Section 3.3 page 3-9 and 3-10

**Preamble:**       On pages page 3-9 and 3-10 YEC discusses transmission costs.

**Request:**

- (a)   Transmission Brushing decreases from \$1.161 million in 2014 to \$1.069 million 2015 and to \$1.034 million in 2016, then increases to \$1.182 million in 2017. Please fully explain why total Transmission brushing decreases between 2014 and 2016.
  
- (b)   In the response to (a) above, please fully explain why the decreases experienced between 2014 and 2016 cannot be maintained into 2017 and 2018. In the response please fully explain what causes the increases in detail and do not just refer to implementation of the YEC vegetation management policy.

**CW-YEC-22**

**Issue:**           **Non Fuel Operating and Maintenance Expenses**

**Reference:**       YEC Application, Section 3.3 page 3-11

**Preamble:**       On pages page 3-11 YEC discusses distribution costs.

**Request:**

- (a) Please fully explain why YEC only spent \$39,000 on distribution brushing in 2016.
- (b) Distribution Brushing decreases from \$0.262 million in 2014 to \$0.160 million in 2015 and to \$0.039 million in 2016, then increases to \$0.304 million in 2017. Please fully explain why total Distribution brushing decreases between 2014 and 2016.
- (c) In the response to (b) above, please fully explain why the decreases experienced between 2014 and 2016 cannot be maintained into 2017 and 2018. In the response please fully explain what causes the increases in detail and do not just refer to implementation of the YEC vegetation management policy.

**CW-YEC-23**

**Issue:**           **Non Fuel Operating and Maintenance Expenses**

**Reference:**       YEC Application, Section 3.3 page 3-11 and 3-12

**Preamble:**       On pages 3-11 and 3-12 YEC discusses general operating and maintenance costs.

**Request:**

- (a) Please fully explain why Transportation, Maintenance of Company Owned Property, and SCADA Communication decrease between 2015 and 2016.
- (b) Please fully explain why the costs for Transportation, Maintenance of Company Owned Property, and SCADA Communication are forecast to increase in 2017, and why the decreases experienced in 2016 do not continue into 2017.



**CW-YEC-24**

**Issue:**           **Non Fuel Operating and Maintenance Expenses**

**Reference:**      YEC Application, Section 3.3 page 3-12 through 3-14

**Preamble:**      On pages page 3-12 through 3-14 YEC discusses Administration costs. In total, administration increases by \$600,000 (7.1%) yet the explanations focus on where the increases are, not why the costs increase.

**Request:**

- (a) Please provide a detailed explanation of why each of the cost items included in Administration change from year to year, between the 2013 and 2016 actual costs.
- (b) Please provide a detailed explanation of why each of the cost items is forecast to change in 2017 from the 2016 actual results.
- (c) Please provide a detailed explanation of why each of the cost items is forecast to change in 2018 from the 2017 forecast.

**CW-YEC-25**

**Issue:**           **Non Fuel Operating and Maintenance Expenses**

**Reference:**       YEC Application, Section 3.3 page 3-14 and 3-15

**Preamble:**       On pages 3-14 and 3-15 YEC discusses its insurance and RFID

**Request:**

- (a) Please fully explain all changes in the YEC insurance coverages, including changes in limits, deductibles, or any other changes in the coverage.
- (b) In Table 3.11, YEC provides a 10 year history of RFID annual charges. Please provide a detailed analysis of the items included in each year. Please update the table to include 2016 actual data.

**CW-YEC-26**

**Issue:**           **Rate Base, Depreciation and Amortization**

**Reference:**       YEC Application, Section 3.4

**Preamble:**       In Table 3.14, YEC provides depreciation and amortization.

**Request:**

- (a) Please confirm that YEC is using the exact same depreciation and amortization rates as approved in 2013. If not confirmed, please fully explain and provide a detailed analysis of each change in depreciation or amortization rates, along with an explanation of the reason for the change.
- (b) If (a) above is not confirmed, please provide a depreciation study in support of any changed depreciation or amortization rate.
- (c) Please provide a detailed working paper, in excel format, that applies the depreciation rates used by YEC to plant and contribution balances to arrive at total depreciation and amortization.

**CW-YEC-27**

**Issue:** Return on Rate Base

**Reference:** YEC Application Section 3.5

**Preamble:** In section 3.5.1, YEC discusses cost of debt.

**Request:**

- (a) Please fully explain if the debt secured through the Yukon Development Corporation is funded by the Yukon Development Corporation (or the Yukon Government) or borrowed in the market by the Yukon Development Corporation and then provided to YEC.
- (b) If, in response to (a) above, the financing is borrowed in the market, please fully explain whether the debt secured through the Yukon Development Corporation includes any mark up or premium that is retained by the Yukon Development Corporation, or if the cost of debt is mirrored down to YEC at cost. If there is a premium retained by the Yukon Development Corporation, please provide a detailed analysis of the amount and rate of the premium.

**CW-YEC-28**

**Issue:** Return on Rate Base

**Reference:** YEC Application Section 3.5 and Section 8

**Preamble:** In section 3.5.2, YEC discusses Return on Common Equity. In Section 8, YEC provides more detail about its requested ROE.

**Request:**

- (a) On page 8-1, lines 12-14, YEC states it faced “considerably higher risk levels than ATCO Electric Yukon (AEY)”. Please provide a detailed analysis of the risks faced by each of AEY and YEC. In the response, please provide copies of any and all outside research or expert reports that YEC relied on to reach its conclusion.
- (b) In Table 8.1 and 8.2, YEC includes three comparators, Fortis BC Inc, PNG West and PNG NE.
  - i. Please fully explain why YEC only considered three comparators.
  - ii. Please explain why YEC did not include AltaGas Utilities Inc. (AUI) as a comparator. Please provide similar data as in Tables 8.1 and 8.2 for AUI.
  - iii. Please provide a complete list of other Canadian utilities that have revenues of less than \$100 million

**CW-YEC-29**

**Issue:**       **Vegetation Management Policy**

**Reference:** YEC Application, Appendix 3.1

**Preamble:** In Appendix 3.1, YEC provides its vegetation management policy, dated May 2017.

**Request:**

- (a) Please provide the date of any prior vegetation management policy. If a prior policy exists, please provide a copy of the policy with all changes clearly identified.
  
- (b) Please fully explain the process for developing this version of the vegetation management policy. In the response, please provide copies of all other such policies from other utilities that YEC examined or considered in the preparation of this policy.

**CW-YEC-30**

**Issue:** Reserve for Injuries and Damages (RFID) Policy

**Reference:** YEC Application, Appendix 3.2

**Preamble:** In Appendix 3.2, YEC provides its RFID, dated March 2012,

**Request:**

- (a) Please confirm that this is the latest policy. If not confirmed, please provide the latest policy, with any changes from this policy clearly marked.
- (b) The review date is February 2015. Please fully explain what review took place in February 2015, and the results of the review.

**CW-YEC-31**

**Issue:** Rates

**Reference:** YEC Application, Tab 4

**Preamble:** In Tab 4, YEC discusses rates.

**Request:**

- (a) Please confirm that YEC has not included any Phase II rate adjustments in this application, and that this is solely a Phase I application. If not confirmed, please provide a detailed Cost of Service study in support of new rates.
- (b) Please confirm that YEC is not proposing any changes to its Terms and Conditions of service. If not confirmed, please provide a revised copy of its Terms and Conditions of Service, with all changes clearly marked.
- (c) Please advise when YEC expects to file its next Phase II application and/or Cost of Service Study and explain its understanding of any government directions or government-imposed constraints that impact YEC's answer.



**CW-YEC-32**

**Issue:** Capital Projects

**Reference:** YEC Application, Section 5.2.1.1

**Preamble:** In Section 5.2.1.1, YEC discusses a legal dispute with a contractor.

**Request:**

- (a) At lines 23, 24 and 25 of page 5-6, YEC mentions costs of \$2.715 million, \$2.574 million, and \$2.117 million. At line 9 of page 5-7, YEC identifies the amount in dispute as \$1.623 million and legal fee of \$0.962 million. Please provide a detailed analysis of the cost in question. In the response, please itemize the total costs in dispute and the related legal fees separately.
- (b) Please fully explain how the costs and legal fees have been treated in YEC's accounts, and for rate making purposes.
- (c) At lines 27-28 YEC mentions a final settlement and an appeal. Please provide the Court docket number of any proceedings leading to any decision that is under appeal, the citation to the decision and the court action number of any appeal from that decision.

**CW-YEC-33**

**Issue:**           **Capital Projects**

**Reference:**      YEC Application page 6-6

**Preamble:**      At page 6-6, YEC responds to a board direction to include business cases for all projects greater than \$1 million. In the response, YEC indicates that Business Cases are provided in Tab 5. In a review of Tab 5, sections 5.2.1 and 5.3.1, there is a description of each major project.

**Request:**

- (a) Please confirm that the documentation in sections 5.2.1 and 5.3.1 are what YEC asserts are its business cases. If not confirmed, please provide references to where YEC has provided business cases.
- (b) Please fully explain what internal documentation YEC provides to management for approval and sign off of capital projects.

**CW-YEC-34**

**Issue:** Capital Projects

**Reference:** YEC Application, page 5.4-2, PDF page 257, Schedule 5.2

**Preamble:** Under “Development of Asset Management Program”, YEC states:

Currently there is no asset management methodology or plan for managing critical hydro and transmission assets at YEC. This results in ad hoc repairs and replacement projects that are costly and unplanned. An asset management program will consist of documented plans to systematically assess major asset groups (Hydro, Substations, T&D) and manage the planning of investments to meet overall corporate goals. This project will develop the asset management program and involves defining program goals and scope, a gap analysis of current state and desired future state, development of strategies for assessing and managing the different asset groups, and the creation of an implementation plan for the program.

On lines 2-8 of page 55 (PDF page 176), YEC indicates that it has focussed on projects required to address sustaining capital requirements.

In Appendices 5.3 and 5.4, YEC provides a summary of each project between \$100,000 and \$1 million.

CW requires information to assess YEC’s current approach to asset replacement.

**Request:**

- (a) Please fully explain the current YEC method to decide which assets should be replaced. In the response, please provide a detailed explanation of how, under YEC’s current approach, customers can be assured that costs are prudent, and YEC has undertaken the least cost alternative.
- (b) Please fully discuss and explain YEC’s asset monitoring processes and procedures. In the response, please provide the results of any inspections, testing or other processes that have driven the YEC capital plan for this GRA.
- (c) Other than for the major projects on schedule 5.2, please provide an analysis that demonstrates that the forecast project and costs are required to sustain

- capital and assets. In the response, please fully explain the impact of delaying the costs outside the test period. In effect, please explain why the costs are required now.
- (d) For L170 Line Access (PDF page 249), YEC indicates that it lacks the necessary permitting and the asset may not have been constructed to an acceptable standard.
- i. Please fully explain when the L170 line was built and who built it.
  - ii. Please fully explain why customers should pay for costs to correct an asset that was not constructed to an acceptable standard, and lacks the proper permitting.
  - iii. Please provide a list of all YEC assets that are not constructed to an acceptable standard, or lack proper permitting.
- (e) On PDF page 283, YEC discusses Mayo Transient Trailer unit.
- i. Please provide an analysis of the number of nights that the proposed unit will be used.
  - ii. Please provide the actual nights that local accommodation were used for each of 2013-2016.
  - iii. Please provide the cost of local accommodation for each of 2013-2016.
  - iv. Please provide the forecast annual operating costs for the Trailer unit.

**CW-YEC-35**

**Issue:**           **Capital Projects**

**Reference:**      YEC Application, Section 5.2.1.2

**Preamble:**      In Section 5.2.1.2, YEC discusses the Aishihik Elevator Shaft Structural Steel Rehabilitation project.

**Request:**

- (a)    Please provide the detailed initial estimate or budget for the project.
- (b)    Please explain any variances between the initial estimate and the actuals/latest forecast.
- (c)    Please provide the status of the project.

**CW-YEC-36**

**Issue:** Capital Projects

**Reference:** YEC Application, Section 5.2.1.3

**Preamble:** In Section 5.2.1.3, YEC discusses the Aishihik Electrical and Control Upgrades project.

**Request:**

- (a) In line 15 of page 5-8, YEC mentions end of life. Please provide all analysis conducted by YEC that demonstrates end of life. In the response, please confirm and discuss whether YEC determines end of life based on condition or age.

**CW-YEC-37**

**Issue:**           **Capital Projects**

**Reference:**       YEC Application, Section 5.2.1.4

**Preamble:**       In Section 5.2.1.4, YEC discusses Communications Upgrades projects.

**Request:**

- (a)    On lines 3-8 of page 5-12, YEC discusses the benefits of the projects. Please fully explain each benefit, and any cost savings that result.
- (b)    Please fully explain all research done by YEC that demonstrate that the purported benefits are wanted or needed by customers.

**CW-YEC-38**

**Issue:**           **Capital Projects**

**Reference:**      YEC Application, Section 5.2.1.5

**Preamble:**      In Section 5.2.1.5, YEC discusses the Hydro Unit #WH4 Overhaul project.

**Request:**

- (a)    In lines 3-6 of page 5-15 YEC discusses a 10 year Major Overhaul. Please fully explain the basis for a 10 year major overhaul, including discussion of practises by other utilities, and industry standards.
  
- (b)    Please fully explain whether all assets are subject to a 10 year major overhaul. If all assets are not subject to a 10 year major overhaul, please fully explain why not, and which assets are subject to a 10 year major overhaul.



**CW-YEC-39**

**Issue:**           **Capital Projects**

**Reference:**      YEC Application, Section 5.2.1.7

**Preamble:**      In Section 5.2.1.7, YEC discusses the T&D – Breaker Replacements project.

**Request:**

- (a)    In line 18 of page 5-18, YEC mentions end of life. Please provide all analysis conducted by YEC that demonstrates end of life. In the response, please confirm and discuss whether YEC determines end of life based on condition or age.

**CW-YEC-40**

**Issue:**           **Capital Projects**

**Reference:**      YEC Application, Section 5.2.1.8

**Preamble:**      In Section 5.2.1.8, YEC discusses the T&D - Line Replacement project.

**Request:**

- (a)    On lines 16 and 17 of page 5-19, YEC discusses two events that it purports drive the need for an external assessment of the line (Line 18). Please provide the external assessment
  
- (b)    Please provide all documents provided to the entity conducting the assessment, and all instructions given to the entity.

**CW-YEC-41**

**Issue:**           **Capital Projects**

**Reference:**      YEC Application, Section 5.2.1.12

**Preamble:**      In Section 5.2.1.12, YEC discusses the LNG Third Engine project.

**Request:**

- (a)    YEC indicates that the project is driven by the 2016 Resource Plan. Please fully explain all alternatives examined to defer the project to 2019, or avoid the project entirely.

**CW-YEC-42**

**Issue:** Capital Projects

**Reference:** YEC Application Section 5.3

**Preamble:** On page 5-31, YEC discusses a number of projects that are under way, with costs in WIP, including Sustaining Capital (\$2.899 million), Capacity Planning Requirements (\$13.067 million) and potential future Generation and Transmission requirements (\$9.845 million), which in total amount to \$25.811 million.

**Request:**

- (a) Please fully explain what approvals, if any, YEC is seeking in this GRA, regarding deferred costs.
- (b) Regarding the Capacity Planning Requirements projects, YEC indicates that the projects are driven by the 2016 Resource Plan. Please fully explain all alternatives examined to defer each project to 2019, or avoid each project entirely
- (c) Please provide the status of each Capacity Planning Requirement Project.
- (d) Regarding the Thermal Plant (Section 5.3.1.4), please fully discuss and explain all renewable energy options considered in the evaluation of this project.