

ATCO Electric Yukon (AEY) 2016-2017 GRA

Information Requests of AEY
from
John Maissan

Section 1 Introduction

JM-AEY-1-1	<p>Page 1-5 In “Key Assumptions” the labour inflation rates in each of the test years of 2016 and 2017 are stated to be 3.25% and 3.0% while general inflation rates are forecasted to be 2.20%</p> <p>(a) Please provide a table that provides for the last 10 years (2006 to 2015 inclusive) and the two test years, each of: requested labour inflation rates requested of the Yukon Utilities Board (“Board”) in GRAs; the labour inflation rates approved by the Board; the general inflation rates forecasted in GRAs; and the actual inflation rates for Yukon.</p> <p>(b) Please explain why labour inflation rates are consistently above general inflation rates.</p>
JM-AEY-1-2	<p>Page 1-6 Regarding staff positions:</p> <p>(a) Please provide the actual average annual staffing levels for the last 10 years as well as the two test years.</p> <p>(b) How many (number and percentage) full time staff earned \$100,000 or more per year in wages and benefits?</p>

Section 2 Sales and Revenue

JM-AEY-1-3	<p>Page 2-1</p> <p>(a) Please describe how facilities like the new Sarah Steele Building, the new Salvation Army building, the new food store, and the Whistle Bend extended care facility have been included in the forecast.</p> <p>(b) What are the actual sales from each of these four large customers that have been included in each of the test years?</p>
JM-AEY-1-4	<p>Table 2 page 2-2</p> <p>(a) Please provide a version of Table 2 that adds a column of Actual non-normalized sales so comparisons can be made with the figures in Table 1.</p>
JM-AEY-1-5	<p>Page 203 lines 23 to 27</p> <p>(a) Please provide any information available to AEY on the reduction in sales due to the DSM program as distinct from any other reason. If no distinction can be made between DSM and other reason (e.g. price elasticity) please indicate so.</p>

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	<p>(b) What microgeneration capacity was connected at the end of 2015?</p> <p>(c) Please detail the lost sales in 2014 and 2015 due to the micro-generation program.</p> <p>(d) With respect to the microgeneration program please provide information on the revenue lost due to reduced sales as well as the cost reductions due to reduced wholesale purchases from Yukon Energy and the resale of no-cost energy exported to the grid from the microgeneration customers.</p>
JM-AEY-1-6	<p>Schedule 2.1</p> <p>(a) The residential sales forecast for 2016 (147,111 MWh) are below any of the 3 previous test years even though 2015 sales (148,605 MWh) were over 1,300 MWh higher than in 2014 (the lowest of the 3 previous test years). Please explain how this can be considered realistic?</p> <p>(b) Are residential sales for the first 6 months of 2016 above or below the 2015 sales?</p> <p>(c) Similarly the commercial sales forecast 2016 (152,187 MWh) are about 2,500 MWh below the lowest sales of the 3 previous test years (2014 was least at 154,709) and even though 2015 (155,346 MWh) was up over 1,600 MWh from 2014. Please explain how this can be considered realistic given some major commercial projects now under construction?</p> <p>(d) Are commercial sales for the first 6 months of 2016 above or below the 2015 sales?</p>

Section 3 Purchase Power

JM-AEY-1-7	<p>Schedule 3.2 Hydro Generation (Fish Lake)</p> <p>(a) Please provide justification as to why the projected generation from the Fish Lake hydro system for 2016 and 2017 is below the approved generation levels for 2014 and 2015 and substantially below the actual generation for 2014 and 2015?</p> <p>(b) What has been the actual generation from the Fish Lake hydro system for the first 6 months of 2016 and how does that compare to the first 6 months of each of 2014 and 2015?</p>
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Section 4 Fuel Costs

JM-AEY-1-8	Schedule 4.2 (a) Please provide a table detailing the most recent fuel purchase cost and the average diesel fuel cost in the first 6 months of 2016 in cents per litre by community.
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Section 5 Operations and Maintenance Expenses

JM-AEY-1-9	Page 5-3 Pension costs (a) Please confirm that if AEY's request for the continuation of the deferral account for pension cost is granted, the ratepayers would in effect experience the actual cost determined to be appropriate by the AUC rather than the "placeholder" amounts shown for 2016 and 2017.
JM-AEY-1-10	Schedule 5.2 Public Information (a) Please justify why ratepayers should have paid for the AEY's cost related to AEY's choice to change its name from YECL to AEY.

Section 7 - Depreciation

JM-AEY-1-11	Depreciation (a) Please confirm that the depreciation rates used in 2016 and 2017 will be the same as in effect in 2015, and if not please explain any changes.
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Section 8 Return on Rate Base

JM-AEY-1-12	Page 8-2 BCUC GCOC proceeding (a) Has the BCUC issued its decision? If so please provide the relevant information.
JM-AEY-1-13	Page 8.7 item (b) Watson Lake LNG Bi-Fuel study cost – deferred charge (a) Please justify why any portion of the \$493,000 study cost should be paid for by ratepayers given that this project has not been approved by the YUB?
JM-AEY-1-14	Schedule 8.2 (a) For each year from 2008 to 2015, and including the applied for parameters for the test years 2016 and 2017, please provide a table that includes for each year the applied for capital borrowing, the applied for borrowing interest rate, the approved capital borrowing, the approved borrowing interest rate, the actual amount borrowed,

	<p>and the actual interest rate.</p>
<p>JM-AEY-1-15</p>	<p>Attachment 8.1 Concentric Energy Advisors evidence</p> <ul style="list-style-type: none"> (a) Page 6: Noted that the AUC set the 2015 ROE at 8.30%. Has the AUC reached a decision yet in its 2016 Cost of Capital hearing and if so what were their decisions with respect to interest rates on debt and ROE? (b) Page 11 lines 9 through 21 and page 16 lines 5 through 11: Based on the arguments presented here please confirm that the Brexit vote is also likely to represent a drag on the Canadian economy and reduce debt interest costs? (c) Page 23 lines 16 and 17: Please confirm that weather normalization of forecasts will in the longer term provide AEY with adjustments for non-normal weather, i.e. some years weather related sales will be higher and in others lower but they should even out if the normalization has been correctly carried out. (d) Page 23 lines 16 and 17: Please confirm that the YUB, in past decisions, has indicated that AEY is to make adjustments for DSM sales reductions at the time of submitting its GRAs. (e) Page 24 lines 15 to 18 and page 25 line 1: <ul style="list-style-type: none"> i. Please confirm that in order for customers to switch between electric and oil or propane heating requires customers to have dual heating systems including electricity and either oil or propane. ii. Please provide the data the AEY relied on to conclude how many customers have dual systems and that this represents enough to make a measurable difference to AEY sales. iii. Does AEY believe that the choice of heating systems in new building construction (residential and or commercial) has changed due to the recent drop in oil and gas prices? If so please provide the data supporting this conclusion. (f) Page 25 lines 4 to 9: Please confirm that any reduction in sales due to the microgeneration program will result in a reduction in wholesale purchase cost, and that any microgeneration export to the grid is available to AEY at no cost (paid for by GY) and is re-sold at retail prices without attracting any wholesale cost. (g) Page 26 lines 9 through 14: <ul style="list-style-type: none"> i. Please provide the data that AEY relied on to conclude that residential customers are changing their heating systems from electric to oil or propane. ii. Given the cost of replacing heating systems in residential

	<p>dwelling, is this not highly unlikely?</p> <p>(h) Page 29 Weather Related Risk: Please confirm that AEY and its predecessors have operated in Yukon for over 100 years and that they understand and take weather into account in their planning to address disruptions.</p> <p>(i) Page 30 competition from alternative fuels: As government policies that discourage the use of fossil fuels take effect, does not AEY stand to benefit substantially in the form of increased sales volumes as customers switch from oil and propane to electric heat?</p> <p>(j) Page 30 lines 26 and 27: Please confirm that the present Yukon Government has repeatedly stated a position opposed to a carbon tax.</p>
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Section 9 Capital Additions

JM-AEY-1-16	<p>Page 9-3 conversion of existing street lights to LED</p> <p>(a) Please provide the average capital cost of the replacement of a conventional street light to LED; the average life forecasted for an LED street light; the reduction in energy consumption per unit in conversion from conventional to LED; the average life of a conventional street light; the average life of an existing conventional street light; and the average cost of replacing a conventional street light bulb.</p> <p>(b) Please provide a life cycle cost and energy comparisons between conventional and LED street lights.</p>
JM-AEY-1-17	<p>Schedule 9.2</p> <p>(a) For the Fish Lake hydro system please provide a table summarizing the total capital expenditures (actuals) in each year for 2010 to 2015 and projected expenditures in 2016 and 2017. If capital expenditures beyond 2017 are anticipated please also indicate what they are.</p>

Section 12 Diesel Displacement

JM-AEY-1-18	<p>Page 12-1</p> <p>(a) Please confirm that it is the intention of the governments, first Nations, and others referenced to replace the use of fossil fuels with renewable energy rather than to switch from one fossil fuel to another.</p> <p>(b) In lines 20 to 22 please confirm that ATCO is referring to its intent to reduce environmental impact by replacing fossil fuel generation with renewable generation.</p> <p>(c) Please confirm that it is ATCO's understanding from all information tabled in the lengthy Yukon Energy YESAB and YUB proceedings</p>
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	that the life cycle GHG impacts of LNG / gas generation is in the same order of magnitude as diesel generation.
JM-AEY-1-19	<p>Page 12-2 lines 13 to 16</p> <p>(a) Is its ATCO's assumption that renewable energy will be more expensive in the long term for Yukon's electricity customers than continued fossil fuel generation?</p> <p>(b) If the answer to (a) above is yes, is it also ATCO's assumption that the diesel generation will be the main supply and the renewable energy generation will only displace a convenient portion of the diesel generation as opposed to making the renewable generation the main supply and having the diesel fill in around it only as required?</p>
JM-AEY-1-20	<p>Page 12-2 Renewable and alternative energy study</p> <p>(a) The implied assumption in this section appears to be that ATCO owned and operated renewable energy facilities would be the most cost effective for the ratepayers. Please explain.</p>
JM-AEY-1-21	<p>Page 12-3 Study Overview</p> <p>(a) It appears that ATCO will only study and consider dispatch controlled renewable energy options, is this correct?</p> <p>(b) If so what technologies will be considered?</p>
JM-AEY-1-22	<p>Page 12-6</p> <p>(a) Please confirm that this \$500,000 study will go out to public tender.</p>
JM-AEY-1-23	<p>Page 12-6 lines 10 to 13 Watson Lake bi-fuel</p> <p>(a) Given that governments have stated that intent is to displace fossil fuel generation, is it not incorrect to say that this project meets the governments' goal by displacing one fossil fuel with another?</p>

Appendices – Business Cases

JM-AEY-1-24	<p>Appendix 3 Watson Lake bi-fuel</p> <p>(a) Page 1 No 2 (LNG is often cheaper...: Please provide a 25 year or longer historical comparison of energy cost in oil and in natural gas per million BTU (or per GJ) by either the US Energy Information Agency or the Canadian National Energy Board.</p> <p>(b) Please provide the Sproule price forecasts that ATCO relied on.</p> <p>(c) What is the ratio of prices at present?</p> <p>(d) At what ratio of prices would the delivered diesel and the delivered Fortis and AltaGas LNG options break even?</p>
JM-AEY-1-25	Appendix 4 Watson lake Unit #2 replacement

	<p>(a) Should renewable energy generation be connected to the Watson Lake system, how would the dispatch on various diesel generators vary from the present?</p> <p>(b) What factors would limit the amount of various renewable generation options that the system could absorb? Please explain.</p>
JM-AEY-1-26	<p>Appendix 5 Old Crow unit 3 replacement</p> <p>(a) We hear that there are plans to add a significant amount of solar PV generation to the Old Crow system. How will this change the hours each unit operates?</p> <p>(b) What factor or factors will limit the amount of solar PV generation that the Old Crow system can absorb? Would a new 600 kW generator not limit the amount of solar or other renewable generation that can be added to the grid?</p> <p>(c) With an increase in the amount of solar PV generation added to the system would a 250 kW unit not operate more hours rather than fewer?</p>
JM-AEY-1-27	<p>Appendix 6 Destruction Bay unit 2 replacement and Appendix 11 Destruction Bay unit 3 replacement</p> <p>(a) An increasing amount of solar PV generation is being added to the Destruction Bay – Burwash Landing system and there are plans for a wind power project of about 300 kW as well. Please describe how these projects were factored into the selection of the size of the generator.</p> <p>(b) What is the lowest amount of diesel generation that, in ATCO's opinion, must be kept running at all times?</p> <p>(c) How can the amount of renewable energy be increased and the amount of diesel generation be reduced further?</p> <p>(d) What steps will ATCO take to displace more diesel generation with renewable energy once the wind project is operational?</p> <p>(e) There appears to be an inconsistency between the background information provided in the two referenced appendices, please explain.</p>