

Yukon Energy Corporation (YEC) and The Yukon electrical Corporation Ltd.
(YECL) Phase II GRA

Information Requests of YEC & YECL
from
John Maissan, Leading Edge Projects Inc.

Application

LE-YEC/YECL-1-1 Page 4: Did YEC and YECL consider or discuss rate design options “between” options A and B, in particular with respect to the percentage of 2009 diesel cost that the runoff rate is set at? Please describe these discussions and explain why no middle ground option was developed and brought forward.

Tab 3 Cost of Service

LE-YEC/YECL-1-2 Page 3-5, line 25 Aishihik Plant: Does the Aishihik plant normally contribute capacity to meeting the winter peak demand on the WAF system?

LE-YEC/YECL-1-3 Page 3-5, lines 27-29 (and also similarly Page 3-9, lines 20-22): Here we find the comment “...Aishihik generation is considered to not contribute to the WAF system’s ability to serve peak loads at critical times due to transmission constraints.”

- (a) Does the transmission line that connects the Aishihik plant to the WAF grid have less than 30MW carrying capacity during the winter period?
- (b) What is its carrying capacity of this line during the winter?
- (c) Is the Aishihik plant not relied upon first and foremost for meeting a large portion of the WAF peak load in winter as previously recognized in GRAs (see Page 3.4A-8)?

LE-YEC/YECL-1-4 Page 3-5, line 27:

- (a) Is the N-1 planning criterion a COS classification methodology?
- (b) Please explain why what happens during an emergency situation should dictate a COS classification.
- (c) Is it not usual for remote power plants in Canada to feed into their grid by a single transmission line?
- (d) How many and what percentage of other Canadian power utilities changed their generation COS classifications when they adopted the N-1 planning criterion?

- LE-YEC/YECL-1-5 Page 3-5, line 25 Aishihik Plant:
- (a) How many hours has the Aishihik transmission line been out service or constrained in its carrying capacity on an unplanned basis during each of the past 10 winters (October through April)?
 - (b) How many hours during each of the past 10 winters has the Aishihik power plant not been available or constrained on an unplanned basis due failures within the plant or substation (e.g. power cable failures, pot-head failures, etc.)?
- LE-YEC/YECL-1-6 Page 3-5, line 25 Aishihik Plant and Page 3-6, line 7 Mayo Hydro: Which customer classes would see an increase in allocated costs and which customer classes would see a decrease in allocated costs if the classification of the Aishihik and Mayo power plants were to be restored to 60% to energy and 40% to demand?
- LE-YEC/YECL-1-7 Page 3-6, line 7 Mayo Hydro: Why should the existence of an emergency back-up diesel generator in a community dictate the COS allocation of a hydro plant if the hydro plant is relied upon first and foremost?
- LE-YEC/YECL-1-8 Page 3-12, Table 3.1 (and Page 3.3A-1 line 22): Since system peak is typically during the supper hour during cold weather and which is typically winter and dark, it seems peculiar that Street lights and Space Lights would have a CP load factor of only 46.7% (indicating that less than half of them are on at system peak). Please explain why these numbers were not adjusted from the ATCO Electric study to make them more appropriate to the more northerly region that Yukon is.

Tab 4 YEC Rate Design – Yukon Energy Discussion

- LE-YEC/YECL-1-9 Page 4YEC-12, lines 19-21:
- (a) Regarding “heritage” infrastructure (e.g. Whitehorse Rapids, Aishihik, and Mayo power plants), is it not true that public (taxpayer) funds (federal, territorial, and YDC) have subsidized and are subsidizing some significant projects being constructed at present – in particular the CSTP and the Mayo B hydro plant?
 - (b) Is the cost to the electrical ratepayers of this new infrastructure (CSTP, and Mayo B) not close enough to “heritage” infrastructure so that there will be no increase in average rates because of these projects?
 - (c) Since average rates will not be going up how can the utilities really charge “...increased prices that reflect incremental costs for new generation”?
- LE-YEC/YECL-1-10 Page 4YEC-17 and Tab 7 page 7-5: There is no discussion that the utilities seriously considered seasonal rates. The rationale indicated is

that there are no studies that indicate a cost benefit.

- (a) Do the utilities have any studies that indicate that seasonal rates would not be cost effective? If so please provide copies of these studies.
- (b) Have the utilities considered the possibility that seasonal rates may encourage power consumption during the summer season when hydro supplies are ample?
- (c) The need for diesel generation in the winter as load growth seems well documented in this the utilities' Phase II GRA, and in Yukon Energy's 2008-2009 GRA. Given this and the utilities preparedness to implement additional rate blocks why do they think seasonal rates would not be cost effective compared to the traditional approach?

LE-YEC/YECL-1-11 Page 4YEC-20, line 20: Why did YEC/YECL consider a rate block of 700 to 2000 kWh for residential customers rather than looking at two rate blocks within the present OIC limitation of 1000 kWh for equalized rates?

LE-YEC/YECL-1-12 Page 4YEC-26, lines 5-9:

- (a) Why did Yukon Energy select 80% of the cost of diesel, \$0.2239 per kWh, which seems bordering on punitive, as the runoff rate for what is a first step towards making runoff costs incremental diesel costs, as opposed to a figure somewhere between 50% (which is only marginally above present rates) and 80%?
- (b) About 11.3% of bills annually exceed 2500 kWh in consumption whereas about 29.9% of bills annually exceed 1000 kWh in consumption (Page 4.1A-4 and others). Did Yukon Energy consider sending a somewhat stronger signal to the larger percentage of customers by setting a higher rate for the second block energy? Why did Yukon Energy choose not to do so?

LE-YEC/YECL-1-13 Page 4YEC-30, lines 11-13: The proposed General Service non-government third energy block rate of \$0.2239 is identical to the runoff residential rate and seems no less punitive in this rate class. Why did Yukon Energy not spread the economy and efficiency "signal" to more customers by having a higher second block rate?

LE-YEC/YECL-1-14 Tables A4.1 & B4.1: Please provide a table of information of overall residential non-government and General Service non-government annual (2009) energy consumption broken down by monthly consumption blocks of no less than 250 kWh for residential customers and no less than 1000 kWh for General Service customers. For example residential non-government consumption 0-250 kWh in a month = ___ kWh per year; 251 to 500 kWh in a month = ___ kWh per year; 501 to 750 kWh in a month = ___ kWh per year; etc.

- LE-YEC/YECL-1-15 Pages 4.1A-4&5: We note that the bill comparisons are carried out with and without the government IER subsidy; in fact it appears that Option A rate design is intended to facilitate the potential end of the IER by lowering first block rates. Is Yukon Energy aware of any plans by YTG to terminate the IER?
- LE-YEC/YECL-1-16 Page 4.1A-5: The bill calculations shown in this table cannot be exactly duplicated with the information provided at the bottom of the table. Please provide actual calculations for a residential bill for 1250 kWh in a month under (1) existing rates and (2) under proposed rates showing the order in which the calculations are actually carried out and all the digits of the rates and charges used in the calculations.
- LE-YEC/YECL-1-17 Pages 4.1A-4&5 and other similar bill comparisons: Are the Income Tax Rebate and GST included in these calculated bills?

Tab 4YECL Yukon Electrical's Proposed Rate Design

- LE-YEC/YECL-1-18 Page 4YECL-4, line 12: Please describe how the proposed energy rates which reduces the cost of energy for all monthly consumption under 2500 kWh in a month representing 98.3% of all residential bills (and 97.8% of energy consumption) sends signals encouraging economy and efficiency to customers.
- LE-YEC/YECL-1-19 Page 4YECL-5, line 3: Please describe how the energy rate for the second block, which is lower than the present runoff rate plus riders R and J, was determined.
- LE-YEC/YECL-1-20 Page 4YECL-5, line 3: Please describe how the proposed second block rate will discourage the installation of electric heating on the WAF system which is driving up winter loads and diesel generation on the margin to service this load.
- LE-YEC/YECL-1-21 Page 4YECL-5, line 3: Please describe how and why the third rate block (runoff) was set at 2500 kWh in a month.
- LE-YEC/YECL-1-22 Page 4YECL-5, line 3: Please describe how signals for economy and efficiency are sent to customers in the large and small diesel zones.

Tab 5 Terms and Conditions of Service

- LE-YEC/YECL-1-23 Page 5-3, lines 16-18: Please explain why a discretionary "may" is added in the proposed rewording as opposed to leaving it certain. Will this not simply result in push-back from all affected customers and therefore complaints and a higher administration cost for all customers to bear?
- LE-YEC/YECL-1-24 Page 5-5, Table 5.2: For residential (single dwellings) are any of the MILs of neighbouring utilities the actual average cost of either an

- overhead or an underground connection?
- LE-YEC/YECL-1-25 Page 5-5: What is the average cost of a new **overhead** power connection to a single family home in Whitehorse?
- LE-YEC/YECL-1-26 Page 5-7, lines 10-11: Given the lengthy process to get utility investments in secondary sales approved in the first place, please explain why the investment in secondary customers will be terminated as opposed to being left as a placeholder and set to \$0.00.
- LE-YEC/YECL-1-27 Pages 5-7&8, and page 5.1-34:
- (a) Please explain or provide examples of extensions of service to customers not covered in Paragraph 2 of Schedule B.
 - (b) How are summer-only seasonal businesses treated now and how would they be treated in future?
 - (c) How are recreational use cabins and cottages treated now and how would they be treated in future?
- LE-YEC/YECL-1-28 Page 5-7, line 27 & on: The suggested new wording implies that a residential customer who uses propane or oil to heat water and / or for cooking, and who is energy efficient and consequently has a very low power consumption (and whose load characteristic thus varies materially from the average), would or could be treated differently from high residential power consumers. Please explain how these customers would be treated.
- LE-YEC/YECL-1-29 Page 5.1-5: The proposed Terms and Conditions of Service indicate that the Electric Service Tariff which is composed of the rate schedules and the Terms and Conditions of Service (presently the Electric Service Regulations) are available on both Yukon Energy's and Yukon Electric's websites. While the Electric Service Regulations were found on both, the author could not find the rate schedules on either website on June 16. Did the author overlook them or are they not yet there? Are the utilities going to place them on their websites?
- LE-YEC/YECL-1-30 Page 5.1-12 & 13: How does Yukon Electric ensure that customers do not use or install electric heat in diesel served communities?
- LE-YEC/YECL-1-31 Page 5.1-14 and Page 7-4, Cost Sharing: For each of Yukon Energy and Yukon Electric please provide the following information for non-industrial customers:
- (a) For each of the years 2000-2009 the annual administration cost for all cost sharing tracking activities (post construction) for distribution extensions towards which non-industrial customers paid construction contributions. Please provide the supporting documentation.
 - (b) For each of the years 2000-2009 the total number of distribution extensions towards which non-industrial customers paid

construction contributions.

- (c) For each of the years 2000-2009 the number of distribution extensions towards which non-industrial customers paid construction contributions in excess of \$5,000 each.
- (d) For each of the years 2000-2009 the number of distribution extensions towards which non-industrial customers paid construction contributions in excess of \$10,000 each.
- (e) For each of the years 2000-2009 the number of distribution extensions towards which non-industrial customers paid construction contributions in excess of \$15,000 each.
- (f) For each of the years 2000-2009 the number of distribution extensions towards which non-industrial customers paid construction contributions in excess of \$20,000 each.
- (g) For each of the years 2000-2009 the number of distribution extensions towards which non-industrial customers paid construction contributions in excess of \$25,000 each.

LE-YEC/YECL-1-32 Page 5.1-14 and Page 7-4, Cost Sharing: For each of Yukon Energy and Yukon Electric please provide the following information:

- (a) For each distribution extension included in response to LE-YEC/YECL-1-31 (c) please provide the number of new customers that connected to cost sharing projects in the 5 years that the cost sharing arrangement was in place.
- (b) For each distribution extension included in response to LE-YEC/YECL-1-31 (d) please provide the number of new customers that connected to cost sharing projects in the 5 years that the cost sharing arrangement was in place.
- (c) For each distribution extension included in response to LE-YEC/YECL-1-31 (e) please provide the number of new customers that connected to cost sharing projects in the 5 years that the cost sharing arrangement was in place.
- (d) For each distribution extension included in response to LE-YEC/YECL-1-31 (f) please provide the number of new customers that connected to cost sharing projects in the 5 years that the cost sharing arrangement was in place.
- (e) For each distribution extension included in response to LE-YEC/YECL-1-31 (f) please provide the number of new customers that connected to cost sharing projects in the 5 years that the cost sharing arrangement was in place.

LE-YEC/YECL-1-33 Page 5.1-35 part (a): The first sentence does not appear to make sense, please provide the correct (or clearer) wording.