Leading Edge Projects Inc.

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October 18, 2008

Yukon Utilities Board
Box 31728
Whitehorse, Yukon
Y1A 6L3

Attn: Ms. Wendy Shanks, Chair

Re: Final Argument YECL 2008-2009 GRA

Dear Ms. Shanks:

Attached is the Leading Edge Final Argument. As indicated in the hearing I have various travel and work commitments that dictated that I had to complete this argument ahead of schedule. I will apologize in advance for any typos or other errors that may have escaped my notice from the lack of review time.

As instructed by the Board staff, I will only send this to you with the understanding that Board staff will circulate it to all other parties at the appointed time.

Thank you for the opportunity to participate in this GRA process.

Yours truly,

John Maissan

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IN THE MATTER OF THE YUKON ELECTRICAL COMPANY LIMITED 2008 – 2009 GENERAL RATE APPLICATION

Heard before the

YUKON UTILITIES BOARD

October 7-9, 2008

FINAL ARGUMENT OF JOHN MAISSAN LEADING EDGE PROJECTS

Overall General Impressions

The Yukon Electrical Company Limited (YECL) has in preparing its 2008-2009 General Rate Application (GRA) YECL has made assumptions and requests that, overall, favour its sole shareholder and debt holder ATCO Electric over the ratepayers. Examples include: YECL's capital structure, the interest rate on new debt, the return on equity, the full time equivalents (FTEs) in YECL personnel, the FTE vacancy rates, the proposed capital expenditures (with large projects weakly supported), the sales forecast, the Fish Lake generation forecast, and the lack of programs or actions to deal with the high costs of diesel generation in off-grid communities. This is not to say that ratepayers get treated badly, but if YECL so desired, ratepayer interests could be better served, and in the author's view should be.

It seems that the YECL GRA contained in virtually every cost category requests for increases that far exceeded costs experienced in the years preceding the two test years and significantly exceeded the growth rate in sales, numbers of customers, and inflation. This gives the impression that either both costs and projects have been deferred in recent years or everything possible has been added to this GRA since YECL is finally before the Board after 12 years – or both.

It is the author's impression that YECL has, at least since the last GRA some 12 years ago, consistently operated in the manner described in the first paragraph above as demonstrated by a return on equity consistently above the average of other Canadian regulated utilities. I believe that this shows that YECL is managed in a manner that makes it a very low risk utility.

At the hearing YECL and ATCO Electric representatives were often defensive or avoided answering questions directly when cross examined by the City of Whitehorse and Yukon Energy, and when the answers were obvious to all present. This left the impression that the application was not well thought out or prepared in favour of YECL's owner or both.

Similarly downward revisions of return on equity (ROE) figures previously filed with the Board left an impression of trying to hide profits.

Specific issues

Sales Forecast

A great deal of detailed work went into preparing the sales forecast as outlined in the Application, in responses to IRs, and in the hearing. The information on the record and discussed during the hearing (YEC-YECL 2(e) Revised, attachment 1; Exhibit C1-18; UCG-YECL-30 Revised, transcript p 259 to 270) indicates that for every year for which information is available (1996, 1997, and 2003 to 2007) YECL has underestimated their sales. During the hearing this was acknowledged by YECL to be to their benefit (and it would be to YECL's detriment if sales were below forecast). At page 347 lines 24 to 29 of the transcript YECL attributes some of the alleged "over-earning" to cold weather increasing sales. The information in YUB-YECL 4 attachment 28 when put along side other information clearly indicates that even in warmer winters sales exceeded forecasts.

The only conclusion one can draw from this is that YECL is conservative in their forecasting and one can expect, as a matter of routine, the actual sales to exceed the forecasts.

Diesel Fuel costs

YECL's actual diesel fuel costs have averaged over $5 million per year in 2006 and 2007 (Application Schedule 4.1) or over 11.5 % of revenue requirement plus rider F (Application Schedule 1.1 and Schedule 4.1). Costs are also forecasted to exceed $5 million in each of 2008 and 2009 or in excess of 11% of revenue requirement. On p 58 of the transcript (lines 15 to 19) we learn that if fuel stays at $1.25 per litre as per the August 2008 Rider F adjustment, revenue requirements for 2009 will increase by a further $1.56 million. Despite this significant cost borne by all ratepayers, YECL has chosen not to have any active conservation or efficiency programs in diesel served communities. The reason provided in response to LE-YECL 43 that there was a utility disincentive as lost sales would reduce earnings. However given the current rate structure, of which Ms. McShane seemed to be ignorant prior to the hearing, Ms. McShane admits that conservation provides no disincentive to the utility (transcript p223-225). A Canadian Electricity Association report provided by YECL strongly endorses the use of demand programs "…particularly where fuel prices continue to remain volatile …" (LE-YECL 17 attachment 2, page 13 of 15). It is the author's view that because the risk of fuel price volatility is passed directly on to the ratepayer YECL simply does not want to be bothered with such programs. If they really cared about the ratepayers (or the environment, or both) they would be taking concrete action.

Pelly Crossing Diesel Deferral Account

The request for this deferral account shows just how sensitive YECL is to having to pay diesel fuel costs themselves – they want to pass on the risk to ratepayers. YECL did not have a deferral account for Stewart Crossing's conversion (transcript p283) so the net reduction in costs were to YECL's benefit. Was there anything stopping YECL from passing the net benefits at Stewart Crossing back to ratepayers?

Income Tax Deferral Account

Changes in income tax rates are expected to be very modest, down from 34.5% to 34.0% between 2008 and 2009 (compared to 36% in 2006 and 2007). The tax payable in recent years has averaged a little over $1 million per year so the change, on average, is only in the order of about $60,000. This seems small for the request for a deferral account so the desire must be driven by another motive which the author is at a loss to understand. If a variation of this amount is important to YECL it does verify that it really is a low risk utility.

Staffing Levels (Full Time Equivalents)

In 2003 YECL's target FTE level was 49.15 (CW-YECL 8(d) Attachment 1) and the requested approval for 2009 is for 57.43 FTEs (Application Section 1, Attachment 1). This is an increase of 16.8%. Over the same period the number of primary power customers rose 10.6% and the primary sales rose 12.8% (from Application Schedule 2.1), substantially below the requested increase in FTEs. A significant portion of this increase (4 FTEs) is in linemen which YECL says is related, in large part, to an increase in the amount of in-house capital work that will be done (Transcript p354-357). However, YEC-YECL 8 Revised, p4 of 11 which provides a breakdown of capital and O&M labour shows only a modest increase in capital labour cost from 2007 but a large increase in O&M labour cost. This modest increase in capital labour is forecasted despite a significant increase in the proposed capital expenditures. On balance the author does not find that the explanations were very credible and is of the view that YECL is trying to increase its staff compliment as much as it possibly can hope to justify. In light of the significant increase in staffing costs this is not acceptable.

Vacancy Rate and Staff Remuneration

YECL is proposing to increase labour and benefit costs substantially in order to reduce vacancies (Application p5-2 and 5-3; YUB-YECL 8, and YEC-YECL 8 Revised p11 of 11). YECL is expecting to have only 1 FTE vacancy in 2009. In fact from the hearing we were left with the impression that there was now only one vacancy (Transcript p369, line 18). Based on past history this seems rather low but with an increase in average compensation of 22.5% (from $102,680 in 2007 to $125,816 in 2009) per FTE from 2007 to 2009 (YEC-YECL 8 Revised p11 of 11) this is may be achievable. However, the substantial increase in FTEs plus the substantial increase in staff compensation results in cost increases that, in the author's opinion, exceed justification.

Alberta Inflation Rate

YECL is used the 2007 Alberta inflation rate of 5% for non-labour O&M (Application p1-3). In British Columbia, Yukon, and indeed across Canada that same year inflation rates were all 2.5% or less (YUB-YECL 8, and LE-YECL 19). The justification provided was that most of YECL's material supply and transportation originates in Alberta (LE-YECL 19). It does not seem reasonable that with our global economy everything must be sourced from the highest cost province. In the author's view this is 5% inflation assumption is particularly inappropriate now with the global financial crisis and rapidly declining commodity prices.

Non-labour O&M costs

In addition to using the Alberta inflation rate of 5%, there are other substantial increases in non-labour O&M costs. This issue was examined in detail by Yukon Energy at the hearing (Exhibit C1-13, Transcript p45 to 62 and beyond that on various specific issues). The suggested overall increase in non-fuel controllable costs was over 25%. It was clear to everyone that there are large increases being requested by YECL to be passed on to ratepayers. However, there are various specific reasons, such as the rate case amortization, and some others that cannot be dealt with by inflation increases from 2007. The author was not left with the impression that YECL did everything in their power to minimize cost increases to ratepayers.

YECL Affiliate Cost Increases

Schedule 5.3 of the Application details some significant increases in Affiliate costs overall into the test years from prior years. YECL indicates that the increases are largely related to new and additional services (LE-YECL 22) a significant portion of which is related to the proposed new ATCO CIS. While the author is not comfortable with these cost increases overall, there is only the after hours answering service to question, as that service must have been provided by others previously.

Depreciation

Depreciation methods received detailed scrutiny during the hearing (Transcripts p 62 to 86, and p 243 to 255). In particular the merits of the average service life (ASL) method and the equal life group (ELG) method of depreciation were compared and contrasted. The author's understanding of the situation is that both methods are used and are applicable in different circumstances. It is also understood that at the end of the day the methods result in the same thing – the depreciation of the asset and the recovery of the net salvage cost although there may be some differences in the allocation of intergenerational "charges". YECL proposes to use the ELG method as it has done for many years, and this method may be more applicable once the new international financial reporting system (IFRS) is implemented. The author understood from the discussions that Yukon Energy uses the ASL method and advocates this method for YECL as this would result in a short term decrease in depreciation expense and hence a decrease in upward pressure on power rates. The author is of the view that there is not adequate justification to have YECL change its method of depreciation at this time. Changing the depreciation method may simply be exchanging some benefit now for higher costs in future.

Capital Structure

Capital structure, cost of debt, and return on common equity (ROE) were discussed at length in the hearing. It is the author's view that the debt – equity ratio will determine what a reasonable ROE is, and is thus, to a degree, flexible. Cost of debt and ROE are discussed in more detail below. As discussed under ROE, it is the author's view that YECL is a low risk utility.

Cost of Debt

YECL's application proposes a 6.60% effective interest rate for its new debt (Application p8-2 and Schedule 8.3). This was based on the projected cost of borrowing for CU Inc. (of 4.55% long term Canada bonds plus 200 basis points) which mirrors the debt down to its subsidiaries. Evidence by Foster Associates Inc. (Ms. K. McShane) indicated that this was reasonable based on long term bond rates of 4.55% (Transcript p157, 168) plus 200 basis points. The projections were made early in 2008. On the stand Mr. Freedman of ATCO Electric under cross examination by Mr. Marriott (Transcript p278 and 279) divulged that CU had issued 30 year debentures on August 18, 2008 and that the interest rates averaged 5.573% and that this would be mirrored down for YECL's 2008 capital requirements at 5.623%. YEC-YECL 39(g) showed that the long term Canada bonds on June 30, 2008 was 4.08% equivalent to the average of the first six months of the year. Clearly the forecasts prepared both internally at ATCO and externally failed to predict the drop in long term (30 year) Canada bonds and underestimated the ability of CU Inc. to borrow at about 150 basis points above this rate – both significant departures from the forecasts. To the author this indicates that both forecasts were made conservatively (favoured YECL), and also calls into question the forecast for 2009.

Return on Common Equity (ROE)

In its application YECL proposes an ROE of 9.25% based on a capital structure of 47.5% equity and 52.5% debt. This is based on Ms. McShane's evidence (Application Section 8, Attachment 1) that begins with the Alberta Utilities Commission (AUC) benchmark of 8.75% for a low risk utility and for which she judges YECL would need an equity component in the upper end of the 47.4% to 52.5% range to meet. She indicates that for an equity component of 47.5% in the capital structure the ROE should be 9.25%.

The ROE was dealt with in many IRs and discussed at length in the hearing and the references will not be listed here. In the author's view the discussions can be summarized as follows. In past YUB decisions YECL was considered to be a low risk utility and the YUB has allowed, at least sometimes, an ROE lower than its parent company was allowed in Alberta. YECL is primarily a distribution utility but it does have diesel generation facilities. YECL has a number of deferral accounts (diesel fuel price flow through, diesel contingency fund, and purchase power flow through) and has asked for two more (for Pelly crossing fuel cost, and for income tax variance). It also has a reserve for injuries and damages which seems to cover even relatively minor diesel generator problems (LE-YECL 27). Despite warmer and colder years affecting sales YECL has consistently earned a reasonable ROE for its owner, in fact consistently close to 2% above the allowed returns for Canadian utilities in recent years. YECL has, since the last GRA increased its common equity ratio from well under 40% to a little over 40%.

It is the author's view that, as witnessed with the forecast cost of debt, the forecast of a reasonable return on common equity for YECL has been conservatively prepared. A fair return on equity for YECL is probably lower for the proposed capital structure than is being requested.

Capital Expenditures

The YECL GRA proposes significantly increasing capital expenditures compared to previous years (Application Schedule 9.1). To the author the appearance is of catching-up in the test years for costs carefully managed in the past to ensure that YECL earned a reasonable ROE. In LE-YECL 55 YECL states that it does not defer upgrades that are required for safety and reliability, and while this may be true, the author believes that there have probably been discretionary projects that have been deferred. It is the author's view that the capital expenditures proposed in the Application are higher than is reasonable under the present circumstances – there are far too many other cost increases being requested in this Application. Five capital projects will be discussed individually below: the new customer billing system (ATCO CIS), the Carcross stand-by diesel, brushing, the Automated Meter Reading (AMR) project, and Fish Lake generation improvements.

ATCO CIS

The proposed new ATCO CIS system is described in a business case provided in response to YUB-YECL 16(b) (Attachment 1) and will cost about $1.488 million. It will replace an outdated system that is becoming obsolete. In addition to the capital costs that will be recovered from ratepayers over time this project will increase operating costs by some $130,000 per year (LE-YECL 22) over the existing billing system. To the author it seems surprising that a new system would cost so much more to operate than and existing outdated system, one would have expected operating economies with a new system. Aside from being suspicious about all of the charges that pass from YECL to its affiliates, there is not the detailed information available, nor does the author have the expertise, to be able to judge whether this is reasonable or not. It has a flavour of unreasonableness but the author must leave it to others to comment further.

Carcross Stand-by Diesel

YECL proposes to add a 1.5 MW mobile diesel to the distribution grid at Carcross (Application page 9-23). During the hearing (Transcript p116-124, p332-333, p364-366, and Exhibit B-17) this unit was discussed in detail. From all the information provided and the discussions in the hearing one can conclude that in YECL's GRA the justification of the addition of this generator was based on Yukon Energy's 20 Year Resource Plan (a process that YECL did not participate in) but without any consultation with Yukon Energy (Transcript p 117, lines 10-14, and further). During the hearing the justification for the generator was based on reliability and frequent outages in the Carcross – Tagish area (Transcript p116 lines 23-26, p332 lines 5-11, and others). During cross examination by Mr. Landry it became clear that YECL had not examined alternatives and had not done a cost benefit analysis (Transcript p364-366). Furthermore in a directly related capital project matter the enhanced brushing (wider cleared right of way) has reduced outages throughout the YECL service area (Transcript p390-391). Another improvement option would be to put taller power poles in areas of tall trees whenever poles are being replaced for age or other reasons to reduce the probability of tree related outages does not appear to have been seriously considered (Transcript p363). The author is at a loss to explain why these options were not considered as alternatives. The distance from Whitehorse to Carcross is only 71 km, not 90 to 100 as stated in the hearing (Transcript p394 lines 8-11).

The author has lived in Whitehorse for over 20 years and is well aware of the frequent outages in Carcross and Tagish. It is indeed regrettable that YECL did not put more serious thought into this project prior to the GRA. The author is also at a loss to explain why YECL, if it has been so concerned about reliability in the Carcross Tagish area, it has not improved its right of way brushing along the power line – it has always been within YECL's control to deal with this.

All that having been said, Carcross is the only significant established community in Yukon that does not have back-up diesel generation. The people in this area have had the short end of the stick for too long, in the author's opinion. The author does believe that it is appropriate for the proposed back-up diesel project to proceed.

Brushing

YECL has in recent years been increasing the brushing width along its distribution / sub-transmission lines (Application Section 9, and elsewhere). This is a proven method of reducing tree related outages. In the author's view it is particularly appropriate for YECL's 34.5 kV and 25 kV sub-transmission lines (lines bringing power to Teslin, Carcross, etc) to be brushed wider than they have been. In addition YECL should be required to seriously consider wider cleared areas, or selective tall tree cutting, or tall tree topping, or taller power poles in areas of taller trees on a cost effectiveness basis.

Automated Meter Reading Project (AMR)

YECL proposes to install automated meters in the core area of its service area, a project that would cost over $4 million. The business case for the AMR project is provided in IR YUB-YECL 15(c) Attachment 1 (which actually includes 2 attachments). The benefits were said to include the ability to perform remote connects and disconnects, time of use rates, and net metering. During cross examination it was shown that these three benefits would not be included in the project but would involve additional capital costs (transcript p359-360 and elsewhere). We were also told that there would be no meter reader savings in the test period (Transcript p358 line 5-7). We were also told that it will reduce meter reading errors but there appears to be no data with respect to error rates (Transcript p360-362, 379-380). YECL's view of this project is that "... the business case is extremely strong …". The second Attachment 1 to YUB-YECL 15(c) shows that the NPV of revenue requirements for the AMR project is more expensive than the present system for 8 years after implementation (cross-over in year 9), and we now know that with a 10% cost overrun the cross-over point is in year 15 (Transcript p323).

All considered it is the author's opinion that this is a weak project and given all of the other cots pressures being faced by ratepayers it should be deferred until it can be done with minimal negative impact to rates.

Fish Lake Generation Improvements

YECL proposes to do various upgrades to its Fish Lake hydro system totalling a bit over $400,000 over the test period (Application p9-16 and 9-22). For the required shut down period YECL proposes to reduce the forecast generation to 6.2 GWh per year from about 6.962 GWh per year (Transcript p272-273). The shut down period could vary and this could result in benefits to YECL if actual generation for the test years exceeded 6.2 GWh per year. Under cross-examination by Yukon Energy YECL did indicate that the lost generation could also have been capitalized (Transcript p276-277). It is the author's view that YECL should use a Fish Lake generation forecast that reflects recent practice, 6.962 GWh per year, and that any generation below this actually experienced due to the required rebuilds be clearly documented and the purchase power costs be added to the capital cost of the project and amortized with the improvements. This would be a far more transparent arrangement.

Rate Case Reserve

During the course of the hearing it came to light that approximately $450,000 in a rate case reserve on YECL's accounts was taken directly into retained earnings. YECL claims that this was due to Board Order 2005-17 (YEC-YECL 45(c). The fact that about $450,000 of ratepayers' contributions could be taken straight into YECL's bottom line is most disturbing to the author. This reserve account of ratepayers' money could have paid for a large portion of the cost of this GRA for which ratepayers are now having to pay "again". The author does not know whether this is a misinterpretation on YECL's part, or an unintended result of the Board's Order 2005-17. In any case if YECL cared as much about their ratepayers and service to ratepayers as they claim to they would have set this money aside to cover the present GRA expenses.

Recommendations

Based on all of the information provided in the GRA process and based on the discussions provided above the author provides the following recommendations to the Yukon Utilities Board.

1. The YECL sales forecast should be accepted as presented but that YECL's track record of forecasting accuracy be carefully monitored for future consideration.
2. Given the high diesel fuel costs to serve the isolated communities (but borne by all Yukoners through Rider F) YECL should be directed to put into place for diesel served communities active conservation and efficiency programs with a budget of $20,000 per year for each $1 million forecasted to be spent on diesel fuel in these communities. YECL should be directed to work with other partners such as the Energy Solutions Centre where possible and practical.
3. Given the high cost of diesel fuel in isolated communities YECL should be directed to more actively investigate alternative energy sources with a budget of $10,000 per year for each $1 million forecasted to be spent on diesel fuel in these communities.
4. The Pelly Crossing diesel fuel deferral account be approved but that any delays in connecting Pelly Crossing to the grid should be clearly documented and justified. As a result of this approval YECL should be considered a lower risk utility.
5. The income tax deferral account should be approved but that as a result YECL should be considered to be a lower risk utility.
6. YECL's approved staffing level should be directed to be 55.43 FTEs in 2008 and 2009. In future when the AMR project is implemented the FTEs should be automatically reduced by 1. In part this recommendation is tied to recommendations 7 and 8 below,
7. YECL's approved vacancy rate should be 1 FTE.
8. YECL's staff remuneration proposals should be accepted but as a result of the significant increases the approved FTE compliment should be reduced as per recommendation 6.

9. The application of the Alberta inflation rate for non-labour inflation rate should be disallowed and the approved inflation rate for 2008 should be 4.0% and for 2009 2.5%.
10. YECL's proposed ELG depreciation method should be approved.
11. YECL's capital structure should be tied to the approved ROE, with a higher ROE for a lower level of common equity and vice versa. See also recommendation 13.
12. YECL's cost of debt for 2008 should be 5.623% as presented in the hearing. The approved cost of debt for 2009 should be capped at 6.0%.
13. YECL's return on common equity (ROE) should be 8.75% with an equity level of 47.5% or 9.25% with an equity level of 42.5%. This recommendation is made in light of foregoing recommendations that reduce YECL's level of risk.
14. YECL's approved capital expenditures should be reduced such that their net additions to rate base do not exceed $6.5 million per year (in other words about $9 million per year including contributions in aid of construction). See also the specific capital project recommendations below.
15. The ATCO CIS project should be approved subject to YECL providing a detailed O&M cost comparison between the existing system and the new system to the Board.
16. The proposed Carcross stand-by diesel generator should be approved.
17. YECL's enhanced brushing program should be approved on the condition that they provide to the Board detailed documentation to show that YECL has considered all cost effective approaches to accomplishing improved tree contact reliability.
18. YECL's proposed AMR project should not be approved but deferred to a future time when it can be implemented with less impact on customer rates.
19. The YECL proposed Fish Lake generation improvements should be approved subject to the generation forecast being returned to 6.962 GWh per year and any generation below this level that can be documented to be due to shut-downs, have the replacement purchase power cost added to the capital project cost.
20. In regard to the YECL rate case reserve containing about $450,000 that went straight into YECL's coffers, the author recommends that the Board investigate the matter to determine whether this was an error of judgment on YECL's part or an unintended result of Board order 2005-17. If this was not the intended result of the Board order the author requests the Board to determine if these monies can be required to be returned to offset the costs of the present GRA. If the Board cannot require these monies be returned it is recommended that the Board disallow YECL rate case costs (this and or subsequent proceedings) of an amount equal to the amount of the reserve when it was absorbed.

Respectfully submitted,

John Maissan
Leading Edge Projects
October 18, 2008