YUKON UTILITIES BOARD

IN THE MATTER OF

YUKON ELECTRICAL COMPANY LIMITED (YECL)

2016-2017 General Rate Application (GRA) – Phase 1

EVIDENCE OF RUSS BELL, CPA, CMA

Submitted on behalf of:

The City of Whitehorse

August 23, 2016

Q1. Please state your name, affiliation and address.

A1. I am Russ Bell, CMA, and am principal of Russ Bell & Associates Inc. My business is located in Edmonton, Alberta.

Q2. Please summarize your qualifications.

A2. My qualifications are attached as Appendix A.

Q3. Please summarize your experience.

A3. I hold a bachelor of commerce degree from the University of Alberta, and am a CPA, CMA. I have over 35 years' experience in the utility industry. I have worked in natural gas and electric distribution and transmission utilities, and have represented customer interests in Alberta, British Columbia, the Northwest Territories, as well as in the Yukon. I have been involved in cost of service regulation as well as PBR or incentive regulation. I have provided evidence related to forecasts and forecast error, corporate cost allocations, and business cases.

Q4. Please identify the issue you address in this evidence.

A4. This evidence addresses forecast accuracy, and challenges the reliability and accuracy of certain specific forecasts on the basis of a history of over-forecasting.

Forecast Accuracy

Q5. Why is forecast accuracy important?

A5. While a utility is entitled to a reasonable opportunity to recover prudently incurred costs, it is also incumbent on the regulator to arrive at just and reasonable rates. To me this means that there is a likelihood that the actual costs could be higher or lower than the forecast. When the actual costs are systematically lower than forecast, one must question the reasonableness of the forecasts. When the approved forecast is continually higher than the actual costs for a cost category or item, it means that customers are paying for costs that the utility will not incur. While the utility is entitled to benefit from efficiency gains in the test period, the regulator must ensure that savings are from efficiency gains,

and not the result of over-forecasting. When there is a continual pattern of over-forecasting, that usually means that there is an issue with the forecast, and the subsequent forecast should be adjusted. Further, these savings should be captured in the subsequent rate application, to the benefit of customers.

Q6. Please explain your concern related to YECL's O&M forecasts.

A6. There are several issues with the forecast of O&M. I note that in Schedule 5.1, there is a consistent pattern of over-forecasting of production costs. In 2013, YECL over-forecast production costs by $311,000 (15.4%). In 2014, YECL over-forecast production costs by $408,000 (19.6%). In 2015, YECL over-forecast production costs by $220,000 (10%). Over the three years, YECL has over-forecast production costs by $938,000 (14.9%).

When one looks at the cost per MWh, or per customer, this same pattern is revealed. In CW-YECL-13 (b) attachment 1, the cost per MWh for production is 14.9% lower than forecast over the three years 2013-2015. The same 14.9% variance arises in YECL-13 (b) attachment 2, the cost per customer. Clearly, there is a historical bias to over-forecast the cost of production.

In CW-YECL-13 (b) attachment 1, YECL provides cost per MWh. There are two areas where the historical pattern of costs does not match the forecasts, namely distribution costs per MWh and general costs per MWh.

O&M Per WMh	**Actual**	**Actual**	**Actual**	**Test Period Forecast**	**Test Period Forecast**	**3 year average of actuals**	**Increase over average**	**Increase over average**
	2013	**2014**	**2015**	**2016**	**2017**	**2013-2015**	**2016**	**2016**
Distribution per MWh	9.93	9.37	9.78	10.37	10.65	9.69	0.68	6.56%
General Per MWh	0.56	0.68	0.68	0.78	0.79	0.64	0.14	18.25%

In both cases, the cost per MWh remains relatively constant over the three years of history. The 2016 forecast is materially in excess of the average of actual costs.

Similarly, in CW-YECL-13 (b) attachment 2, YECL provides cost per customer. There are two areas where the historical pattern does not match the forecasts, namely distribution costs per customer and general costs per customer.

O&M Per Customer	Actual	Actual	Actual	Test Period Forecast	Test Period Forecast	3 year average of actuals	Increase over average	Increase over average
	2013	2014	2015	2016	2017	2013-2015	2016	2016
Distribution per Customer	183.74	173.31	181.01	191.94	197.00	179.35	12.59	6.56%
General per Customer	10.44	12.52	12.56	14.48	14.57	11.84	2.64	18.25%
Number of Customers	17,116	17,351	17,624	17,854	18,082			

As with costs per MWh, the cost per customer forecast is materially higher than the average of actual costs.

In both cases, when one looks at the cost per MWh or per customer for the historical actual results, the trend of actual results is relatively constant, with a sharp increase in forecast costs in 2016.

One would expect that for a distribution utility, there should be economies of scale with the growth in the system. YECL is adding customers, and the O&M per customer, particularly for distribution and general, should be experiencing economies of scale. This appears to be happening in the actual results, but is not being reflected in the forecast.

Q7. Please summarize your recommendations for O&M.

A7. For O&M I recommend that the forecast for production be reduced by 15% based on the historic over-forecasting. This over-forecasting for production has been consistent over the last five years. This would result in a reduction of $314,000 in 2016 and $306,000 in 2017.

In addition, for distribution and general O&M, the increase in 2016 is not supported by the historical costs. The historical costs, on a per customer or MWh basis are relatively constant, while the forecasts show dramatic increases. Further, there is an increase in customers forecast, which should result in economies of scale. As such, I recommend that, for distribution and

general O&M, the forecast be limited to the three year average cost per customer. This would result in a reduction of $272,000 in 2016 and $369,000 in 2017

Q8. Please summarize your concerns with the forecast of capital additions.

A8. YECL has admitted that it has over-forecast capital additions related to new extensions. Even if one takes contributions into account, the forecast for Net New Extensions over the period 2013-2015 is 47.7% higher than actuals.[1] This systematic over-forecasting results in customers paying for capital that is not actually put into service. Therefore the forecast for Net New extensions in this application should be reduced by 47.7% to account for the systemic forecast error.

Q9. Please summarize your concern with the forecast cost of debt.

A9. As with production O&M and Net New Extensions, there is a systematic over-forecast for the cost of new debt. In 2014, the approved forecast for new debt was at 5.03%,[2] while the actual cost was only 4.07%,[3] 0.96 percentage points lower than forecast, or a forecast error of 19.1%. Similarly, for 2015, the approved forecast cost of new debt was 5.03%[4] compared to the actual cost of 3.95%,[5] which is 1.08 percentage points lower than forecast, resulting in a forecast error of 21.5%.

The actual cost of debt for 2013 was 4.71%,[6] while the initial forecast for new debt in 2013 was 4.35%.[7]

When one averages the three years forecast error for the cost of new debt, one still arrives at an over-forecast of 0.50%. Based on the pattern of over forecasting the cost of new debt, I recommend that the cost of new debt for 2016 and 2017 be reduced by 0.50% to reflect the historic over forecasting.

[1] CW-YECL-1 (a)
[2] Schedules 8.2 & 8.3
[3] ibid
[4] Ibid
[5] Ibid
[6] Ibid
[7] CW-YECL-21 (c)

Q10. Does this conclude your evidence?

A10. Yes, at this time.