CITY OF WHITEHORSE
(CW)

REFERENCE: **Application, Tables 2.3 and 2.4**

ISSUE: **Sales Forecasts – Forecasting Methods**

PREAMBLE:

CW wishes to understand YEC's forecasting methods.

QUESTION:

a) Please provide a full explanation and demonstration of the statistical forecasting methods used by YEC to forecast energy sales and/or MWh sales per customer in these tables.

b) If no statistical forecasting methods were used by YEC, to forecast energy sales and MWh sales per customer in these tables, please explain why not.

ANSWER:

(a) and **(b)**

Please see response to LE-YEC-1-7(a).

REFERENCE: **Application Section 2.2.1, p. 2-4**

ISSUE: **Sales Forecasts – Whole Sales to YECL**

PREAMBLE:

"**2008 Actuals Year-to-Date:** Yukon Energy's load forecasts for 2008 incorporate actual sales through June 2008, which were not available to YECL as of their filing date of April 30, 2008.

2009 Forecast Load Growth: Yukon Energy's 2009 load forecasts are markedly higher than the YECL forecasts in their GRA reflecting Yukon Energy's analysis of wholesale load growth, including the WAF load growth analysis for the 2001-2004 period (averaging 2.2% per year), as reviewed in the Yukon Energy 20-Year Resource Plan 2006-2025 ("Resource Plan") and the more recent experienced growth rate in WAF wholesales from 2004 to 2007 actuals, at 2.5% per year. Yukon Energy has utilized a growth rate in this range (2.39%) as the basis for estimating load increases from 2008 to 2009 based on this evidence of the experienced longer-term load trends."

QUESTION:

a) For 2008, YEC forecast Wholesale sales growth (1.38%)[1] to be less than that forecast by YECL (2.39%).[2] Is there any reason for YEC's lower forecast other than the incorporation and consideration of actual sales through June 2008?

b) Absent the incorporation of these actual sales through June 2008, would YEC have expected growth for 2008 to be greater than that forecast by YECL, as is the case in 2009. Please explain.

c) How does YEC account for the seeming anomaly of reduced growth in 2008?

d) Please provide an explanation and rationale for the use of the forecast growth of 2.39% for 2009. Please explain exactly what YEC means by the "evidence of the experienced longer-term load trends" and how it was used to determine the 2.39%.

[1] Table 2.1, Page 2-5.
[2] Table 2.1, Page 2-5.

ANSWER:

(a)

Please see YECL-YEC-1-19(c).

(b)

Not Necessarily. Yukon Energy worked with YECL to define the 2008 and 2009 forecasts in late 2007, and ultimately accepted YECL's forecast for 2008 and 2009 for the purposes of business planning. During preparation of Yukon Energy's GRA, it was apparent that the load growth levels assumed for 2009 were below what might be expected for 2009 based on past experience. At the same time, the early months of 2008 were indicating below forecast loads. Consequently, Yukon Energy did not adjust 2008 forecasts upwards during the GRA preparation process, but did adjust 2009 upwards.

(c)

Yukon Energy is not provided the data required to track YECL's retail loads in a manner that permits identification of the reasons for variances. The lower loads in early 2008 could have been due to a lower number of customers connecting, or lower average loads due to weather or other factors. It is also possible that some of the reason for 2008 load growth was loads that would not arise until later in the year (such as new construction) but which was not incorporated in any detail into the monthly forecasts.

(d)

Yukon Energy's initial wholesale monthly load forecast (for all loads other than Pelly Crossing) was to apply a load growth of 2.5% above the same month in 2008 (actual or forecast). The 2.39% in Table 2.1 arises as in the final GRA preparation, Pelly Crossing load was allocated 2.3 GW.h of the total wholesale load, rather than the original estimate of 2.0 GW.h, which served to reduce the load growth otherwise attributed to "ongoing" sales by about 0.1%.

Also see YECL-YEC-1-19(d) in regards to the 2.5% estimate.

REFERENCE: **Application, Tables 2.2 to 2.4, pages 2-16 to 2-18**

ISSUE: **Sales Forecasts – Summary of Customers, Energy Sales and Revenues**

PREAMBLE:

CW wishes to understand YEC's forecasting accuracy.

QUESTION:

a) Please expand Tables 2.2 to 2.4 to include "Forecast" columns for the years 2006 and 2007.

b) For these expanded tables, please provide an explanation for any variances greater than 5% between forecast and actual energy sales for the years 2006 and 2007 for the Residential, General Service, Street Lights and Secondary Sales classes.

c) Please provide an explanation for any variances greater than 5% between forecast and actual "MWh sales per customer" for the years 2006 and 2007 for the Residential and General Service Classes.

d) Please provide an explanation for any variances greater than 5% as per (b) and (c) above for the year 2008, at the time the 2008 update information is provided.

ANSWER:

(a)

Please see Attachment 1 to this response.

(b)

There are only three variances of more than 5% in 2006 or 2007 in Table 2.2: Streetlights in 2006 and secondary sales in 2006 and 2007.

For streetlights, both Dawson and Mayo added street lights that were not anticipated at the time of preparing the business plan forecast in the prior year.

Secondary sales in 2006 were higher than forecast due to 2 new customers and one large established customer using approximately 1.5 GWh more than forecast. (For expanded information on secondary sales forecasting please refer to YECL–YEC–1-23).

The 2007 secondary sales variance was due to 3 of the largest customers all having a high load year and surpassing their historic averages by in excess of 1 GWh each. This level of coincident load was atypical and did not continue into 2008, where a certain level of equipment breakdowns resumed.

(c)

There are no variances of more than 5% in 2006 or 2007 in Table 2.2.

(d)

Yukon Energy has not fully compiled all 2008 sales in the form requested. It is possible to confirm that only 3 categories of sales saw material variances from forecast (greater than 1 GW.h): wholesales (see UCG-YEC-1-22 for 2008 preliminary actuals), secondary sales (2008 sales were well below forecast due to equipment break downs at major secondary customers and material interruptions in the latter part of the year – see UCG-YEC-1-28) and industrial (due to later than expected in-service of Minto, see YUB-YEC-1-17).

Yukon Energy Corporation
Summary of Customers, Energy Sales and Revenues (excluding Riders) - Company

Table 2.2
September 2008
CW-YEC-1-4

Line No.	Description	Approved 2005	Actual 2005	Forecast 2006	Actual 2006	Forecast 2007	Actual 2007	Forecast Existing 2008	Forecast Existing 2009
1	**Residential**								
2	Customers	1,302	1,336	1,323	1,365	1,377	1,390	1,416	1,432
3	Sales in MWh	10,201	10,169	10,271	10,666	10,497	10,908	11,155	11,183
4	MWh sales per customer	7.8	7.6	7.8	7.8	7.6	7.8	7.9	7.8
5	Revenue ($000s)	1,208	1,215	1,223	1,267	1,251	1,313	1,319	1,335
6	Cents per KWh	11.84	11.95	11.91	11.88	11.92	12.04	11.83	11.94
7	**General Service**								
8	Customers	447	450	453	447	457	450	450	457
9	Sales in MWh	16808	18438	17805	17037	17531	17507	18193	19543
10	MWh sales per customer	37.6	41.0	39.3	38.1	38.4	38.9	40.4	42.8
11	Revenue ($000s)	2,304	2,470	2,420	2,301	2,349	2,376	2,442	2,637
12	Cents per KWh	13.71	13.40	13.59	13.51	13.40	13.57	13.42	13.49
13	**Industrial**								
14	Sales in MWh	0	0	0	0	0	0	6,845	29,023
15	Revenue ($000s)	0	0	0	0	0	0	709	3,142
16	Cents per KWh	7.00	7.00	7.00	7.00	7.00	7.00	10.36	10.83
17	**Street lights**								
18	Sales in MWh	252	256	256	270	270	274	278	278
19	Revenue ($000s)	65	66	66	69	70	70	71	71
20	Cents per KWh	25.75	25.64	25.82	25.64	25.88	25.62	25.64	25.63
21	**Space lights**								
22	Sales in MWh	13	14	15	14	14	14	14	15
23	Revenue ($000s)	2	3	3	3	2	3	3	3
24	Cents per KWh	19.76	21.90	20.58	21.48	14.18	22.00	21.82	21.54
25	**Total Company - Firm Retail & Ind.**								
26	Customers	1,749	1,786	1,776	1,812	1,834	1,840	1,866	1,889
27	Sales in MWh	27,274	28,877	28,346	27,987	28,313	28,704	36,485	60,042
28	Revenue ($000s)	3,579	3,754	3,712	3,641	3,672	3,763	4,545	7,188
29	Cents per KWh	13.12	13.00	13.10	13.01	12.97	13.11	12.46	11.97
30	**Wholesale sales**								
31	Sales in MWh	234,542	237,419	241,862	251,861	253,227	254,914	258,989	266,926
32	Revenue ($000s)	16,043	16,239	16,543	17,227	17,321	17,436	17,715	18,258
33	Cents per KWh	6.84	6.84	6.84	6.84	6.84	6.84	6.84	6.84
34	**Total Company - Firm**								
35	Sales in MWh	261,816	266,296	270,208	279,848	281,541	283,618	295,474	326,968
36	Revenue ($000s)	19,622	19,993	20,255	20,868	20,993	21,199	22,259	25,446
37	Cents per KWh	7.49	7.51	7.50	7.46	7.46	7.47	7.53	7.78
38	**Secondary**								
39	Sales in MWh	20,613	18,933	20,550	22,185	21,183	24,225	20,557	16,613
40	Revenue ($000s)	854	767	849	917	875	1,000	850	688
41	Cents per KWh	4.14	4.05	4.13	4.13	4.13	4.13	4.13	4.14
42	**Total Company**								
43	Sales in MWh	282,429	285,229	290,758	302,033	302,723	307,843	316,031	343,581
44	Revenue ($000s)	20,476	20,760	21,104	21,785	21,868	22,199	23,109	26,134
45	Cents per KWh	7.25	7.28	7.26	7.21	7.22	7.21	7.31	7.61

Note:

Excludes revenues from Rider J, Industrial Rider F, and offsets in new Revenue Reduction Rider as set out in Tab 4

Yukon Energy Corporation
Summary of Customers, Energy Sales and Revenues (excluding Riders) - Mayo Dawson

Table 2.3
September 2008
CW-YEC-1-4

Line No.	Description	Approved 2005	Actual 2005	Forecast 2006	Actual 2006	Forecast 2007	Actual 2007	Forecast Existing 2008	Forecast Existing 2009
1	**Residential**								
2	Customers	1,015	1,031	1,024	1,056	1,064	1,073	1,095	1,108
3	Sales in MWh	8,112	7,982	8,129	8,346	8,252	8,510	8,739	8,759
4	MWh sales per customer	8.0	7.7	7.9	7.9	7.8	7.9	8.0	7.9
5	Revenue ($000s)	960	954	968	992	984	1,025	1,033	1,046
6	Cents per KWh	11.84	11.95	11.91	11.88	11.92	12.04	11.83	11.94
7	**General Service**								
8	Customers	370	370	372	366	375	370	372	378
9	Sales in MWh	10,786	11,139	11,224	11,289	11,546	11,808	11,937	13,976
10	MWh sales per customer	29.2	30.1	30.2	30.8	30.8	31.9	32.1	37.0
11	Revenue ($000s)	1,493	1,492	1,525	1,525	1,547	1,603	1,602	1,886
12	Cents per KWh	13.84	13.40	13.59	13.51	13.40	13.57	13.42	13.49
13	**Industrial**								
14	Sales in MWh	0	0	0	0	0	0	0	0
15	Revenue ($000s)	0	0	0	0	0	0	0	0
16	Cents per KWh	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17	**Street lights**								
18	Sales in MWh	154	159	158	173	173	177	181	180
19	Revenue ($000s)	40	41	41	44	45	45	46	46
20	Cents per KWh	25.75	25.64	25.82	25.64	25.88	25.62	25.64	25.63
21	**Space lights**								
22	Sales in MWh	10	12	12	13	13	13	13	13
23	Revenue ($000s)	2	3	3	3	2	3	3	3
24	Cents per KWh	19.75	21.90	20.58	21.48	14.18	22.00	21.82	21.54
25	**Total - Firm Retail and Industrial**								
26	Customers	1,385	1,401	1,396	1,423	1,439	1,443	1,467	1,486
27	Sales in MWh	19,063	19,293	19,524	19,821	19,984	20,508	20,870	22,928
28	Revenue ($000s)	2,495	2,490	2,537	2,564	2,577	2,675	2,685	2,980
29	Cents per KWh	13.09	12.90	12.99	12.93	12.90	13.05	12.86	13.00
30	**Wholesale sales**								
31	Sales in MWh	581	390	695	854	810	855	891	916
32	Revenue ($000s)	40	27	48	58	55	58	61	63
33	Cents per KWh	6.84	6.84	6.84	6.84	6.84	6.84	6.84	6.84
34	**Total - Firm**								
35	Sales in MWh	19,644	19,684	20,219	20,675	20,794	21,363	21,761	23,844
36	Revenue ($000s)	2,535	2,516	2,584	2,622	2,633	2,734	2,746	3,043
37	Cents per KWh	12.90	12.78	12.78	12.68	12.66	12.80	12.62	12.76
38	**Secondary**								
39	Sales in MWh	800	570	550	630	600	659	652	630
40	Revenue ($000s)	42	30	29	33	31	34	34	33
41	Cents per KWh	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20
42	**Total**								
43	Sales in KWh	20,444	20,254	20,769	21,305	21,394	22,022	22,412	24,474
44	Revenue ($000s)	2,576	2,546	2,613	2,655	2,664	2,768	2,780	3,076
45	Cents per KWh	12.60	12.57	12.58	12.46	12.45	12.57	12.40	12.57

Yukon Energy Corporation

Summary of Customers, Energy Sales and Revenues (excluding Riders) - WAF

Table 2.4
September 2008
CW-YEC-1-4

Line No.	Description	Approved 2005	Actual 2005	Forecast 2006	Actual 2006	Forecast 2007	Actual 2007	Forecast Existing 2008	Forecast Existing 2009
1	**Residential**								
2	Customers	288	305	299	309	313	317	322	324
3	Sales in MWh	2,089	2,186	2,142	2,320	2,245	2,398	2,416	2,424
4	MWh sales per customer	7.3	7.2	7.2	7.5	7.2	7.6	7.5	7.5
5	Revenue ($000s)	247	261	255	276	268	289	286	289
6	Cents per KWh	11.84	11.95	11.91	11.88	11.92	12.04	11.83	11.94
7	**General Service**								
8	Customers	77	80	82	80	82	80	78	79
9	Sales in MWh	6,022	7,299	6,581	5,747	5,986	5,699	6,256	5,568
10	MWh sales per customer	78.2	91.5	80.7	71.5	73.0	71.2	80.2	70.5
11	Revenue ($000s)	811	978	894	776	802	774	840	751
12	Cents per KWh	13.47	13.40	13.59	13.51	13.40	13.57	13.42	13.49
13	**Industrial**								
14	Sales in MWh	0	0	0	0	0	0	6,845	29,023
15	Revenue ($000s)	0	0	0	0	0	0	709	3,142
16	Cents per KWh	N/A	N/A	N/A	N/A	N/A	N/A	10.36	10.83
17	**Street lights**								
18	Sales in MWh	97	97	97	97	97	97	97	97
19	Revenue ($000s)	25	25	25	25	25	25	25	25
20	Cents per KWh	25.75	25.64	25.82	25.64	25.88	25.62	25.64	25.63
21	**Space lights**								
22	Sales in MWh	2	1	2	2	1	1	1	1
23	Revenue ($000s)	0.5	0.3	0.5	0.4	0.2	0.3	0.3	0.3
24	Cents per KWh	19.76	21.89	20.58	21.48	14.18	22.00	21.82	21.54
25	**Total - Firm Retail and Industrial**								
26	Customers	365	385	380	389	395	397	400	403
27	Sales in MWh	8,211	9,584	8,822	8,166	8,330	8,196	15,615	37,113
28	Revenue ($000s)	1,084	1,264	1,175	1,077	1,095	1,087	1,860	4,208
29	Cents per KWh	13.21	13.19	13.32	13.19	13.15	13.27	11.91	11.34
30	**Wholesale sales**								
31	Sales in MWh	233,961	237,028	241,167	251,007	252,417	254,059	258,098	266,011
32	Revenue ($000s)	16,003	16,212	16,496	17,169	17,265	17,378	17,654	18,195
33	Cents per KWh	6.84	6.84	6.84	6.84	6.84	6.84	6.84	6.84
34	**Total - Firm**								
35	Sales in MWh	242,172	246,612	249,989	259,173	260,747	262,254	273,713	303,124
36	Revenue ($000s)	17,087	17,477	17,671	18,246	18,360	18,465	19,514	22,403
37	Cents per KWh	7.06	7.09	7.07	7.04	7.04	7.04	7.13	7.39
38	**Secondary**								
39	Sales in MWh	19,813	18,363	20,000	21,555	20,583	23,566	19,905	15,983
40	Revenue ($000s)	812	737	820	884	844	966	816	655
41	Cents per KWh	4.10	4.02	4.10	4.10	4.10	4.10	4.10	4.10
42	**Total**								
43	Sales in KWh	261,985	264,975	269,989	280,728	281,330	285,820	293,618	319,107
44	Revenue ($000s)	17,900	18,214	18,491	19,130	19,204	19,431	20,330	23,058
45	Cents per KWh	6.83	6.87	6.85	6.81	6.83	6.80	6.92	7.23

REFERENCE: **Application page 3 – 4, lines 16 - 18**

ISSUE: **Fuel and Purchased Power**

PREAMBLE:

YEC states: "Forecast fuel prices for the 2008/2009 test years are approximately $1.108 per litre for 2008 and $1.149 per litre for 2009 for Whitehorse. For other Yukon Energy locations, additional costs of 3.2 cents/litre (Faro), 1.5 cents/litre (Dawson) and 0.7 cents/litre (Mayo) apply.

QUESTION:

a) When were these fuel price forecasts for 2008 and 2009 made? What was the basis for these price forecasts at the time the forecasts were made?

b) Are the "additional costs" mentioned additional to the Whitehorse price? If not, please explain the use of the term "additional"?

c) What was the actual average price of diesel fuel for Whitehorse, Faro, Dawson and Mayo during 2008?

d) What was the actual Fuel and Purchased Power cost to YEC during 2008?

e) What is the current (January 2009) wholesale diesel fuel price for Whitehorse? Please revise the 2009 Fuel and Purchased Power revenue requirement forecast to reflect this current price of diesel fuel.

f) Please provide YEC's best current forecast for the average wholesale price of diesel fuel in Whitehorse for 2009. Please advise if such a forecast is or can be derived from the Short-Term Energy Outlook document, page 20, Table 2 which can be accessed at the following link:
http://www.eia.doe.gov/emeu/steo/pub/jan09.pdf

ANSWER:

(a)

Fuel price forecasts for 2008 and 2009 were made on August 28, 2008. The basis for the price forecasts was NYMEX futures market crude oil prices adjusted for refining/shipping costs and exchange rate. At the time, the NYMEX forecasts were relatively constant at a price of approximately $119/bbl in US dollars.

(b)

The "additional costs" mentioned are additional to the Whitehorse price.

(c) and **(d)**

The actual average price for diesel fuel consumed during 2008 operations is as follows:

2008	Cents/L
Faro	84.20
Mayo	62.56
Dawson	97.58
Whitehorse	93.42

The actual average price of diesel fuel purchased during 2008 was:

2008	Cents/L	
Faro	1.074	
Mayo	0.00	No purchases in 2008
Dawson	1.084	
Whitehorse	1.021	

The average price for diesel consumed is lower than average purchase price as YEC uses a weighted average cost for fuel expense and inventory on hand at the beginning of the year at a lower cost than fuel purchases during the year.

(e)

The current wholesale diesel fuel prices for new purchases (January 22, 2009) are as follows:

Faro	77.27
Mayo	78.01
Dawson	79.89
Whitehorse	73.93

Updating the GRA for newer oil price changes requires revision to three components: fuel costs, secondary sales revenues, and "fixed" industrial Rider F amounts.

- **Fuel Costs:** Using the costs shown above, the cost of fuel in 2009 would be expected to be approximately $0.180 million lower than set out in the application.

- **Secondary Sales Rates:** The price of secondary energy is based on oil prices. Current secondary sales prices (at the retail level) are 7.8 cents/kW.h for January-March 2009 and will not be higher than 6.3 cents/kW.h for April-June 2009 (could be lower depending on the February 11 price from the Bureau of Statistics). If one assumes that the 6.3 cents/kW.h price is carried forward to the entire year, the reduction in secondary sales revenues for the year is $0.458 million.

- **Minto Fixed Rider F**: The total revenues from the fixed Rider F charge depends on both YEC's and YECL's forecast fuel price for 2009. Yukon Energy understands YECL forecasts fuel prices for 2009 at approximately 86 cents/litre. Combining an average price for YEC of 77 cents/litre (per above), and an average 2009 secondary price of 6.5 cents/kW.h, yields a fixed Rider F of approximately $0.00, which reduces YEC's revenues by $0.170 million in 2009.

The combined impact of the above is an adverse impact on the revenues required from firm rates of approximately $0.448 million (i.e., the 2009 rate reduction proposed by YEC in this case would be only $0.886 million, instead of the proposed $1.334 million).

(f)

Yukon Energy typically utilizes NYMEX futures values, not forecasts prepared by the Energy Information Administration (EIA). Based on the latest NYMEX forecasts, the 2009 average price for March-December would be on the order of 76 cents/litre in Whitehorse, with appropriate locational adders to the other communities.

REFERENCE: **Application Table 3.4**

ISSUE: **Non-Fuel and Operating Costs - Labour**

PREAMBLE:

CW wishes to understand the labour costs of YEC.

Table 3.4
Employee Complement History

	Actual 2005	Actual 2006	Actual 2007	GRA 2008	GRA 2009
President	1.60	1.50	2.50	2.50	2.50
Communications	1.00	1.00	1.00	1.00	1.00
Human Resources & Info. Mgmt.	6.06	6.01	6.00	7.00	7.00
Business Development	1.08	1.00	1.00	1.00	1.00
Finance, Cust. Acctg. & Purchasing	11.05	11.49	11.63	12.81	12.81
Operations	34.82	39.43	38.60	40.20	40.10
Engineering Services	13.21	13.58	14.00	12.67	12.00
Health, Safety & Environment	1.00	1.00	3.00	3.33	3.33
Total	69.82	75.01	77.73	80.51	79.74

QUESTION:

a) What is YEC's historical vacancy rate for FTEs for 2005-2007 and the forecast rate for 2008 and 2009?

b) Have these vacancy rates been applied to the above employee complements?

c) Please discuss the reasons for any increases or decreases in employees and relate to growth in output, if possible.

d) Please provide a breakdown of the number of Operations employees by Production, Transmission, Distribution and General Operations and Maintenance.

e) Please provide a current organization chart for YEC that shows the location of each FTE in Table 3.4.

ANSWER:

(a) and **(b)**

For historical vacancy rate from 2005-2007, and the forecast rates for 2008 and 2009, please see response to YECL-YEC-1-41(a).

(c)

Please see LE-YEC-1-32.

(d)

The requested information is provided in the table below.

Breakdown of employees listed under Operations in Table 3.4

	Actual 2005	Actual 2006	Actual 2007	GRA 2008	GRA 2009
Production	13.58	14.57	11.69	13.80	13.46
Transmission & Distribution	8.04	9.00	10.00	10.00	10.00
General O&M	13.20	15.86	16.91	16.40	16.64
Totals	**34.82**	**39.43**	**38.60**	**40.20**	**40.10**

(e)

Please see response provided LE-YEC-1-32.

REFERENCE: **Application page 3-6, lines 7-12**

ISSUE: **Non-Fuel and Operating Costs - Labour**

PREAMBLE:

YEC states: "Increases in labour expense make up the remainder of the increase totaling $1.244 million, or 62%. Most of this increase occurred between 2005 and 2007 ($0.996 million). This reflects additional positions, as well as negotiated and step increases. A further $0.248 million is the forecast increase in labour expenses over 2007-2009 (about 1.9% per year). Detailed information on the labour increases by function is provided in the following sections. The Yukon Energy employee complement (FTE) is shown in Table 3.4."

QUESTION:

a) Please provide a table of the average number of FTEs per year (including the test years), the total cost of labour separated by base salaries, overtime, bonuses and the average cost and year to year increases in average cost of an FTE.

b) What is the 1.9% inflation rate of the cost of an FTE based upon?

c) Please provide copies of any labour agreements that apply to YEC's employees.

ANSWER:

(a) and **(b)**

For the table of FTEs, please see LE-YEC-1-32.

For the costs of labour separated into noted categories, please see UCG-YEC-1-38, and UCG-YEC-1-35. Note that 1.9% is not "the inflation rate of the cost of an FTE"; it is the average annual increase in labour costs from 2007 to 2009.

(c)

Please see response to YECL-YEC-1-37(a).

REFERENCE: **Application Table 3.5**

ISSUE: **Non-Fuel Operating Costs - Labour**

PREAMBLE:

CW wishes to understand the labour costs of YEC.

Table 3.5
Production Costs
($000)

	Actual 2005	Actual 2006	Actual 2007	Forecast Existing 2008	Forecast Proposed 2008	Forecast Existing 2009	Forecast Proposed 2009
Labour	$ 2,161	$ 2,418	$ 2,488	$ 2,114	$ 2,114	$ 2,179	$ 2,179
Diesel	173	189	147	191	191	194	194
Hydro	602	551	602	423	423	560	560
Wind	22	5	21	8	8	8	8
Operation Supervision	0	16	23	35	35	36	36
Total Production	$ 2,958	$ 3,179	$ 3,281	$ 2,771	$ 2,771	$ 2,977	$ 2,977

QUESTION:

a) Please discuss the cause of every year-over-year increase/decrease in each category of Production expense in Table 3.5 greater than 10%.

b) What is the inflation factor applied to each category of Production expense between 2008 and 2009? Why are these inflation factors appropriate?

ANSWER:

(a)

Please see UCG-YEC-1-40(c).

(b)

Ongoing non-labour non-fuel related operations, maintenance and administrative expenses for forecast 2009 are based on 2008 spending requirements which are then adjusted for known changes in work to be completed in the year. YEC applied a 2% inflation increase to 2009 spending. According to the Yukon Bureau of Statistics the

annual average inflation rate in Whitehorse for 2007 was 2.5%; the corporation elected to only add 2% to 2009.

REFERENCE: **Application Table 3.5**

ISSUE: **Non-Fuel and Operating Costs – Labour, Transmission**

PREAMBLE:

YEC states: "Transmission labour costs for 2008 and 2009 are well above the actual 2005-2007 levels due to having a full complement of line crew in 2008 and 2009."

QUESTION:

a) Why wasn't there a full complement of line crew during the 2005-2007 period? What was the vacancy rate for transmission FTEs during the 2005-2007 time period?

b) Why does YEC expect to have a full complement of line crew during the test period? What has changed from the 2005-2007 time period?

c) Did YEC in fact have full complement of line crew throughout 2008? If not, please provide the vacancy rate.

ANSWER:

(a), **(b)** and **(c)**

Recruitment for journey Powerline Technicians is challenging for most utilities with transmission and distribution. There is currently a shortage of skilled workers in Canada. There are additional challenges for utilities in Yukon due to geographic location.

In order to address this situation, YEC has engaged four recruitment agencies to provide assistance in recruiting qualified candidates. YEC increased the employee complement by two apprentice Powerline Technician positions in 2006 as a strategy to develop and train employees in-house. This strategy is proving to be a significant help in addressing the vacancy challenge.

Vacancy Rates and FTEs from 2005 to 2008 for transmission are as follows:

2005	11.88%	0.95	FTE's
2006	17.10%	1.71	FTE's
2007	7.84%	0.78	FTE's
2008	8.16%	0.82	FTE's

REFERENCE: **Application page 3-9, Table 3.8**

ISSUE: **Non-Fuel and Operating Costs – General Operating and Maintenance**

PREAMBLE:

CW requires details of YEC's expenses. YEC provides the following table in support of these costs:

Table 3.8
General Operating and Maintenance
($000)

	Actual 2005	Actual 2006	Actual 2007	Forecast Existing 2008	Forecast Proposed 2008	Forecast Existing 2009	Forecast Proposed 2009
Labour	$ 135	$ 139	$ 116	$ 92	$ 92	$ 94	$ 94
Transportation	291	321	370	386	386	394	394
Maintenance of Company Owned Properties	230	242	290	342	342	384	384
SCADA Communication and Special Projects	71	81	72	79	79	80	80
Total General O&M	$ 727	$ 783	$ 848	$ 899	$ 899	$ 952	$ 952

QUESTION:

a) Please discuss the cause of every year-over-year increase/decrease in each category of General Operating and Maintenance in Table 3.8 greater than 10%, as well as the cause for every increase/decrease from 2007 to 2008 for each category.

b) What is the inflation factor applied to each category of General Operating and Maintenance expense between 2008 and 2009? Why are these inflation factors appropriate?

c) Please break down SCADA communication and special projects by year into these two categories.

d) Please provide a full description of the special projects undertaken in each year from 2005-2007 and those special projects forecast for the test years?

ANSWER:

(a)

Table 3.8
General Operating and Maintenance

$000s	Actual 2005	Actual 2006	Incr/(Decr) Dollars	% Increase or Decrease from Pr YR	Actual 2007	Incr/(Decr) Dollars	% Increase or Decrease from Pr YR	Proposed 2008	Incr/(Decr) Dollars	% Increase or Decrease from Pr YR	Proposed 2009	Incr/(Decr) Dollars	% Increase or Decrease from Pr YR
Labour	135	139	4	2.96%	116	(23)	-16.55%	92	(24)	-20.69%	94	2	2.17%
Transportation	291	321	30	10.31%	370	49	15.26%	386	16	4.32%	394	8	2.07%
Maintenance of Company Owned Properties	230	242	12	5.22%	290	48	19.83%	342	52	17.93%	384	42	12.28%
SCADA Communications and Special Projects	71	81	10	14.08%	72	(9)	-11.11%	79	7	9.72%	80	1	1.27%
Total General O&M	**727**	**783**	**56**	**7.70%**	**848**	**65**	**8.30%**	**899**	**51**	**6.01%**	**952**	**53**	**5.90%**

The decrease in labour costs from 2006 to 2007 and from 2007 to 2008 is due to a decrease in the time spent on maintenance due to a focus on capital projects.

The increase in annual transportation costs before 2008 is due to increased fuel price as well as increased consumption. In addition, between 2006 and 2007 an increase in spending occurred on maintenance of the fleet.

The increase in maintenance of company owned properties from 2006 to 2007 is due to the rental of additional space to store files ($30,000 annually), increased fuel costs for the Aishihik house, and the initiation of payments for fuel for community housing (see UCG-YEC-1-43(c)) which was fully implemented by 2008. Also driving the cost increase from 2007 to 2008 was painting and new flooring for the Dawson customer service office. From 2008 to 2009 increases result from continued repairs to the Dawson customer service office, new windows and a new deck for the Faro house, and painting of the trim on the Whitehorse office building.

The SCADA expenses are within 10% annual changes with the exception of 2006, when $8,000 was spent on maintenance.

(b)

Ongoing non-labour non-fuel related operations, maintenance and administrative expense forecasts for 2009 are based on 2008 spending requirements, adjusted by (a) specific changes in work to be completed in the forecast periods, and (b) a 2% inflation increase to 2008 spending. According to the Yukon Bureau of Statistics the annual average inflation rate in Whitehorse for 2007 was 2.5%; given the outlook the Corporation elected to only add 2% to 2009.

(c) and **(d)**

Please see response to YECL-YEC-1-42(g). Note there are no special projects being undertaken in the test years.

REFERENCE: **Application page 3.8, lines 10-11**

ISSUE: **Non-Fuel and Operating Costs - Administration**

PREAMBLE:

YEC provides the following table in support of its Administration expenses:

Table 3.9
Administration
($000)

	Actual 2005	Actual 2006	Actual 2007	Forecast Existing 2008	Forecast Proposed 2008	Forecast Existing 2009	Forecast Proposed 2009
Labour	$ 2,691	$ 2,846	$ 3,288	$ 3,498	$ 3,498	$ 3,605	$ 3,605
Resource Planning	1	6	21	17	17	17	17
Communications	72	87	118	87	87	105	105
Customer Accounting	164	170	189	201	201	206	206
Environmental Mgmt	46	7	30	35	35	52	52
General	873	805	597	745	745	734	734
Information Systems	213	265	341	351	351	425	425
Fish Hatchery	126	106	132	130	130	136	136
Fish Ladder	18	33	11	25	25	26	26
Safety	38	54	133	59	59	162	162
Training	177	139	142	201	201	211	211
Recruitment	170	19	181	165	165	169	169
Board of Directors	156	91	166	145	145	148	148
Union	54	27	32	25	25	26	26
Regulatory Affairs	0	6	106	93	93	57	57
Material Management	300	155	14	42	42	43	43
Contracting	26	8	6	11	11	11	11
Professional Development	16	0	4	15	15	15	15
Total Administration	$ 5,141	$ 4,824	$ 5,511	$ 5,845	$ 5,845	$ 6,148	$ 6,148

QUESTION:

a) Please discuss the cause of every year-over-year increase/decrease in each category of Administration expense in Table 3.9 greater than 10%, as well as every increase/decrease from 2007 to 2008 for each category not already documented on pages 3-11 to 3-12 of the Application.

b) What is the inflation factor applied to each category of Administration expense between 2008 and 2009? Why are these inflation factors appropriate?

c) Please provide the IT Strategic Plan, IT Security Policy and Business Impact Assessment mentioned at page 3-11, lines 15-16 of the Application.

d) How often is the periodic assessment of YEC's safety procedures mentioned at page 3-11, lines 21-23 of the Application required? Please discuss the basis for the $100,000 cost of performing this assessment.

ANSWER:

(a)

Table 3.9
Administration

	$000s	Actual 2005	Actual 2006	Incr/(Decr) Dollars	% Increase or Decrease from Pr YR	Actual 2007	Incr/(Decr) Dollars	% Increase or Decrease from Pr YR	Proposed 2008	Incr/(Decr) Dollars	% Increase or Decrease from Pr YR	Proposed 2009	Incr/(Decr) Dollars	% Increase or Decrease from Pr YR
1	Labour	2,691	2,846	155	5.76%	3,288	442	15.53%	3,498	210	6.39%	3,605	107	3.06%
2	Resource Planning	1	6	5	500.00%	21	15	250.00%	17	(4)	-19.05%	17	-	0.00%
3	Communications	72	87	15	20.83%	118	31	35.63%	87	(31)	-26.27%	105	18	20.69%
4	Customer Accounting	164	170	6	3.66%	189	19	11.18%	201	12	6.35%	206	5	2.49%
5	Environmental Mgmt	46	7	(39)	-84.78%	30	23	328.57%	35	5	16.67%	52	17	48.57%
6	General	873	805	(68)	-7.79%	597	(208)	-25.84%	745	148	24.79%	734	(11)	-1.48%
7	Information Systems	213	265	52	24.41%	341	76	28.68%	351	10	2.93%	425	74	21.08%
8	Fish Hatchery	126	106	(20)	-15.87%	132	26	24.53%	130	(2)	-1.52%	136	6	4.62%
9	Fish Ladder	18	33	15	83.33%	11	(22)	-66.67%	25	14	127.27%	26	1	4.00%
10	Safety	38	54	16	42.11%	133	79	146.30%	59	(74)	-55.64%	162	103	174.58%
11	Training	177	139	(38)	-21.47%	142	3	2.16%	201	59	41.55%	211	10	4.98%
12	Recruitment	170	19	(151)	-88.82%	181	162	852.63%	165	(16)	-8.84%	169	4	2.42%
13	Board of Dircetors	156	91	(65)	-41.67%	166	75	82.42%	145	(21)	-12.65%	148	3	2.07%
14	Union	54	27	(27)	-50.00%	32	5	18.52%	25	(7)	-21.88%	26	1	4.00%
15	Regulatory Affairs	-	6	6	100.00%	106	100	1666.67%	93	(13)	-12.26%	57	(36)	-38.71%
16	Material Management	300	155	(145)	-48.33%	14	(141)	-90.97%	42	28	200.00%	43	1	2.38%
17	Contracting	26	8	(18)	-69.23%	6	(2)	-25.00%	11	5	83.33%	11	-	0.00%
18	Professional Developmen	16	-	(16)	-100.00%	4	4	0.00%	15	11	275.00%	15	-	0.00%
	Total Administration	**5,141**	**4,824**	**(317)**	**-6.17%**	**5,511**	**687**	**14.24%**	**5,845**	**334**	**6.06%**	**6,148**	**303**	**5.18%**

1. **Labour:** The increase in 2007 relates to 2 new positions (Documentation Specialist, and Manager of Environmental Assessment and Licensing), as well as an increase in labour allocations to Information Systems, Health & Safety, and General Administration.

2. **Resource Planning:** The costs associated with Resource Planning activities fluctuate with the amount of consulting and legal services used in each of the years to meet corporate strategic goals and objectives as they relate to Resource Planning activities in a given year.

3. **Communications:** The increase in costs for 2006 and 2007 relates to additional costs to educate the public by producing brochures and advertisements. The costs for 2008 are lower as the brochures are only printed on a two year cycle.

4. **Customer Accounting:** The 2007 increase in costs was due to improved tracking of telephone costs associated with customer-related activities (as

opposed to being allocated to production activities as they were in 2005 and 2006).

5. **Environmental Management:** Costs associated with Environmental Management fluctuate with the amount of consulting fees and legal fees required to review new environmental legislation, regulations and permitting requirements. Overall these costs remain at approximately the same level as 2005 actuals.

6. **General:** Please see response to YECL-YEC-1-38(b).

7. **Information Systems:** Please see response to YECL-YEC-1-33(a).

8. **Fish Hatchery:** Please see response to UCG-YEC-1-44(d).

9. **Fish Ladder:** The increase in costs for 2006 relates in part to the First Nations Program that was introduced in 2006. The 2007 lower than average annual amounts relate to timing of government contributions.

10. **Safety:** Please see responses to YECL-YEC-1-47 and YECL-YEC-1-48.

11. **Training:** Please see responses to YECL-YEC-1-43 and YECL-YEC-1-48.

12. **Recruitment:** Please see response to YECL-YEC-1-38(c) (i).

13. **Board of Directors:** Please see response to YECL-YEC-1-38(d). In 2005, the board hired a consultant to conduct an IT Security Audit. In 2007, an Engineer was hired to provide advisory services to the board.

14. **Union:** The higher than average costs in 2005 result from services provided by consultants specializing in job evaluation. The increase in costs in 2007 results from consulting services for a chief negotiator for union negotiations.

15. **Regulatory Affairs:** Costs associated with Regulatory Affairs activities fluctuate with the amount of consulting and legal services used in each of the years to review regulatory decisions and orders. In 2007 and 2008 there was a significant amount of consulting and legal services required to review Board Orders as a

result of the Resource Plan, the YECL GRA intervention and related activities. Also see UCG-YEC-1-44(j).

16. **Material Management:** Costs for 2005 and 2006 included substantial inventory write-downs, which are not forecast for the test years, while 2007 had a small positive inventory valuation adjustment.

17. **Contracting:** Higher costs were incurred in 2005 to develop contracting and purchasing policies, procedures and best practices.

18. **Professional Development:** Professional development is a contractual obligation related to employment. The budget was used in 2005, but no activities occurred in 2006 and only limited professional development was taken in 2007. The 2008 and 2009 budgets include the expense as a required component of Yukon Energy's costs.

(b)

Please see CW-YEC-1-22(b).

(c)

The requested reports are related to the security of YEC's systems and as such are confidential and cannot be provided.

(d)

Please see YECL-YEC-1-47(b).

REFERENCE: **Application page 3-12 to 3-15**

ISSUE/SUB-ISSUE: **Insurance and Reserve for Injuries and Damages**

PREAMBLE:

YEC states: "The Reserve for Injuries and Damages ("RFID") is an account maintained as approved by the Board, in order to address uninsured and uninsurable losses as well as the deductible portion of insured losses. The reserve serves two purposes: (1) it allows for a balance to be struck between purchasing additional insurance vs. using a self-insurance type approach via the reserve; and (2) it allows the costs of unforeseen events to be smoothed out over a number of years to avoid rate instability for rate payers."

QUESTION:

a) What is the deductible or deductibles in YEC's insurance policy or policies? Has YEC conducted any reviews of its insurance policies with regard to increasing deductibles to reduce purchased insurance costs? If yes, please provide the results of these reviews.

b) How is the function of risk assessment and insurance requirements performed in YEC? What position in the organization chart is responsible for risk assessment?

c) Please provide a continuity schedule of the Reserve for Injuries and Damages account that clearly sets out all additions, charges, opening and closing balances on a yearly basis.

ANSWER:

(a)

Please see YECL-YEC-1-32 (a) and (c).

(b)

As it relates to insurance requirements, Yukon Energy employs a professional insurance brokerage house that specializes in utilities insurance. On an annual basis, the Corporation provides an update to the broker on assets, incidents and changes in operations. The broker reviews coverages and makes recommendations for enhancements. The program is then marketed to key insurance providers and the broker gets quotations on costs (if any) of enhanced coverages. Decisions on coverage reside with the Chief Financial Officer.

(c)

Please see response provided to YUB-YEC-1-6 (a) and (b) and response provided to YECL-YEC-1-29(b).

REFERENCE: **Application Section 5**

ISSUE: **Capital Projects**

PREAMBLE:

CW wishes to better understand YEC's proposed capital projects.

QUESTION:

a) To the extent not covered in the preceding information request, and if any new information is available, please provide detailed updates or YEC's plans to develop new renewable generation, including for each project: i) the potential capacity; ii) forecast costs of construction, iii) timelines and iv) money forecast to be spent within the test years.

ANSWER:

(a)

The main renewable energy project under review at the present time is Mayo B. The YESAB submission with respect to this project notes that it comprises an approximately 10-12 MW powerhouse at a cost most recently estimated at $120 million. The project is targeted for a late 2011 in-service date, and the GRA budget for the test years is $1.7 million 2008 and $6.5 million in 2009.

Outside of this project, see YUB-YEC-1-38(a). No other renewable energy projects presently have targeted in-service dates.