

YUKON  
ENERGY



**YUKON ENERGY CORPORATION**

**&**



**THE YUKON ELECTRICAL COMPANY LIMITED**  
*An ATCO Company*

**RIDER F – FUEL ADJUSTMENT RIDER &  
DEFERRED FUEL PRICE VARIANCE POLICY**

**INTERROGATORY RESPONSES FILED**

**October 28, 2011**



**YUKON UTILITIES BOARD  
(YUB)**



1 **REFERENCE: Rider F application, responses to interrogatories**

2  
3 **ISSUE/SUB-ISSUE: Diesel Fuel Price Variance**

4  
5 **QUOTE:**

6  
7 For each actual litre of diesel consumed to generate electricity, the difference between  
8 the actual weighted average cost per litre of fuel consumed and the most recent GRA-  
9 approved fuel price is recorded in the DFPVA. The variance applies to actual diesel fuel  
10 consumed (all fuel consumed) when calculating additions or deletions to the account, i.e.  
11 **the Companies remain at risk (at GRA-approved fuel prices) for changes in volume**  
12 **from the GRA forecast<sup>1</sup>. [highlight added]**

13  
14 Only the difference between the actual weighted average cost per litre of fuel consumed  
15 and the most recent GRA-approved fuel price is deferred to the DFPVA. This does not  
16 address risks related to changes in fuel volume (at GRA-approved fuel prices) from the  
17 GRA forecast. In this respect costs related to diesel generation in excess of the most  
18 recent Board approved amounts are not deferred<sup>2</sup>.

19  
20 The DFPVA only addresses differences between actual fuel prices and GRA-approved  
21 fuel prices, and does not address any differences in actual and GRA-approved diesel  
22 generation<sup>3</sup>.

23  
24 **PREAMBLE:**

25  
26 The Board wishes to gain a better understanding of the DFPVA.

27  
28 **QUESTION:**

- 29  
30 a) With respect to the DFPVA, please confirm that Companies are at risk for all  
31 costs associated with diesel generation volume variances in excess of the most

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<sup>1</sup> YEC/YECL application, Page 1, 2011; June 30, 2011.

<sup>2</sup> YEC/YECL responses to interrogatories; LE-YEC-YECL-1-1; September 6, 2011.

<sup>3</sup> YEC/YECL responses to interrogatories; LE-YEC-YECL-1-3; September 6, 2011.

- 1 recent Board approved amounts in test years, i.e. YECL (2008 and 2009) and  
2 YEC (2009). Please explain fully.  
3
- 4 b) For non-test years please explain fully how the above phrase “changes in volume  
5 from the GRA forecast” is to be interpreted.  
6
- 7 c) In respect of the Companies’ latest test years, i.e. YECL (2008 and 2009) and  
8 YEC (2009), what are Board-approved diesel generation volumes (MWh) in each  
9 of the test years? Please provide the Board-approved diesel fuel prices  
10 (cents/litre) and total diesel fuel dollars for each of the Companies in each of the  
11 test years.  
12
- 13 d) By unit, please provide a schedule showing the monthly forecast diesel  
14 generation volumes (MWh), the net heat rates (kWh/litre), the forecast litres  
15 consumed and the total diesel fuel dollars that form the bases for the approved  
16 amounts provided in (c) above.  
17
- 18 e) Is it the Companies' determination that forecast diesel generation volume  
19 amounts for non test years are the Board-approved volumes for the latest test  
20 years? Please explain fully.  
21
- 22 f) For each of the Companies, please provide a schedule (Excel spreadsheet) for  
23 2008, 2009, 2010 and 2011 to date comparing:  
24
- 25 i. Approved diesel fuel consumption by month at GRA approved prices and  
26 actual fuel prices; and  
27 ii. Actual fuel consumption by month at GRA-approved prices and actual  
28 prices.  
29
- 30 g) Please provide a detailed explanation as to how "the Companies remain at risk  
31 (at GRA-approved fuel prices) for changes in volume from the GRA forecast"  
32 since, when calculating additions or deletions to the DFPVA, "the [fuel price]  
33 variance applies to actual diesel fuel consumed (all fuel consumed)?

- 1 h) When was the DFPVA methodology and Rider F first approved and how was it to  
2 be implemented? Please explain and provide all supporting documentation.  
3
- 4 i) In respect of Rider F, please provide all supporting documentation where the  
5 Board has approved diesel fuel price variances for diesel fuel volumes greater  
6 than approved GRA forecast diesel fuel volumes.  
7
- 8 j) Does Rider F apply to the WAF-Mayo-Dawson (WAFMD) system only? Please  
9 provide all supporting documentation.  
10
- 11 k) In respect of diesel generation for test years, i.e. YECL (2008 and 2009) and  
12 YEC (2009) that is not on the WAFMD system, how are the Companies  
13 compensated for risk in respect of forecast diesel fuel prices and volumes?  
14
- 15 l) Considering that the DFPVA is a diesel-fuel-price only deferral account, i.e. the  
16 Companies are at risk for generation in excess of approved generation volumes,  
17 what are the Companies' thoughts respecting a monthly calculation that  
18 multiplies the approved forecast volume times the diesel price variance (actual -  
19 forecast) in order to determine a DFPVA balance? Please provide all supporting  
20 documentation.  
21
- 22 m) Further, in addition to the scenario proffered in part (l) what are the Companies'  
23 views in utilizing the last approved retail forecast in order to arrive at a Rider F  
24 rate? Please provide all supporting documentation.  
25
- 26 n) The scenario presented in parts (l) and (m) above, along with a minimum  
27 threshold amount, would facilitate an easy perusal and understanding by both the  
28 Board and intervenors in respect of the Companies' proposed Rider F and  
29 DFPVA quarterly reporting. Please discuss fully and include documentation and  
30 detail supporting the Companies' conclusions.

1 **ANSWER:**

2  
3 **(a) and (b)**

4  
5 Subject to comments elaborated on below, the Companies are at risk at GRA approved  
6 fuel prices for all costs associated with diesel generation volume variances from test  
7 year forecasts as last approved by the Board<sup>4</sup>.

8  
9 The Companies are at risk where their diesel generation requirements increase or  
10 decrease from volumes that were forecast at the last GRA for the following:

- 11
- 12 • Load changes: The Companies are at risk for increased or decreased costs due  
13 to changes in the amount of diesel generation required compared to what was  
14 forecast due to higher or lower than anticipated load (including for ongoing load  
15 growth, or for weather variability impacts). This risk is partly mitigated to the  
16 extent that utility revenue increases or decreases concurrent with such variances  
17 in loads from the Board's last approved forecasts at approved rates.
  - 18
  - 19 • Equipment availability: The Companies are generally at risk for diesel required for  
20 unexpected maintenance or outages of equipment, except where such charges  
21 are appropriately part of insurance claims or uninsured losses.
  - 22
  - 23 • Generator efficiency: The Companies are at risk for changes in the efficiency of  
24 their generating units from the levels forecast at the last GRA, and the  
25 consequent diesel generation required or saved.
  - 26

27 The Companies are not at risk for diesel cost changes due to certain specified factors:

- 28
- 29 • Water availability for WAF hydro generating plants: The Companies are protected  
30 for situations where WAF diesel generation varies (higher or lower than forecast)  
31 due to lower or higher WAF water than long-term average levels (via the DCF).

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<sup>4</sup> Note also that YEC included 2008 as a test year in its last GRA, and in this respect the question is not accurate.

- 1       • Price Fluctuations: The Companies are protected for all situations where the  
2       price of diesel changes from the previous GRA-approved forecast levels,  
3       regardless as to the use or purpose of the diesel fuel (per OIC 1995/90).

4  
5       It is generally expected that the utilities are responsible for and account for the risks to  
6       which they are properly exposed within their GRA load forecasts.

7  
8       Fuel price risks are subject to external market conditions and not within the utilities'  
9       control or ability to forecast. Since 1988 the policy in Yukon has been that utilities are not  
10      subject to specific risks related to diesel fuel price variance. This policy is currently set  
11      out in section 8 of OIC 1995/90. The current practice followed by the Companies is as  
12      noted in the Rider F – Fuel Adjustment Rider & Deferred Fuel Price Variance Policy.  
13      The accounting treatment for YEC fuel costs is to expense fuel at the GRA price as  
14      reflected in rates and to charge any excess costs or savings compared to the GRA  
15      approved price for each litre of fuel consumed to a Fuel Adjustment Deferral Account on  
16      the respective Companies' Balance Sheet. The accounting treatment for YECL is to  
17      chart actual cost to expense and adjust revenue and balance sheet for the difference.

18  
19      As noted in LE-YEC/YECL-1-7 REVISED, to ensure fuel price risk is fully addressed by  
20      the fuel price variance mechanism in Yukon (and in all other jurisdictions where fuel  
21      price risk is handled in a similar deferred manner) the policy applies to all volumes of fuel  
22      consumed. The Companies are not aware of any jurisdiction that provides a fuel price  
23      adjustment mechanism that only addresses fuel price variances for some previously set  
24      forecast volume of fuel.

25  
26      For non-test years, the process is no different than for test years. The Companies pay  
27      for all fuel purchased. The Companies record the diesel generation (kW.h) required,  
28      convert it to litres at the GRA efficiency level<sup>5</sup>, then take the difference between the fuel

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<sup>5</sup> Note that while frequent reference is made to the DFPVA applying to "actual" litres consumed, the mechanical implementation in fact involves taking the actual kW.h of diesel generator output and converting this to litres at the GRA approved efficiency level. This is necessary and practical as there is no way to directly and accurately measure consumption of fuel in generation over short periods – the conventional approach is to "dip" fuel tanks to determine quantities used, but this is only a periodic determination and is not precise particularly in respect of measuring smaller quantities of fuel such as are consumed in communities that use diesel for standby or peaking. Further, the effect of this approach is that the companies remain at risk for changes in efficiency which either drive the consumption of fuel to higher or lower actual litres than would have been calculated at the GRA forecast efficiency level.

1 price paid and the GRA approved price (the “fluctuation” per OIC 1995/90) and charge or  
2 credit that difference to the DFPVA. The now “normalized” cost litres are then charged to  
3 the appropriate account (operating, capital, insurance, etc.) at the normalized price. This  
4 process was followed, for example, by both utilities after the 1996/97 GRA test years  
5 throughout the extensive period of non-test years.

6  
7 **(c)**

8  
9 Please see Table 1 below for YEC for both the 2008 and 2009 latest test years as  
10 included in the compliance filing approved by the Board (fuel price \$/litre).

11  
12 **Table 1:**  
13 **YEC GRA Approved Diesel Generation forecasts for 2008 & 2009**  
14

<b>Approved 2009 GRA Fuel Price (\$)</b>	<b>2008</b>	<b>2009</b>
Whitehorse	0.960	0.960
Faro	0.992	0.992
Dawson	0.975	0.975
Mayo	0.967	0.967
	<b>2008</b>	<b>2009</b>
<b>2009 GRA Diesel Generation (MWh)</b>	1,031	1,262
<small>Note: Includes Line Maintenance and excludes RFID.</small>		
	<b>2008</b>	<b>2009</b>
<b>2009 GRA Diesel Generation Cost (\$000)</b>	377	443
<small>Note: Includes Mechanical Main.</small>		

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16  
17 Please see Table 2 below for Yukon Electrical’s test year information as included in the  
18 compliance filing approved by the Board.

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**Table 2:  
YECL GRA Approved Diesel Forecasts**

**Yukon Electrical Company Limited  
2008-2009 GRA**

	<u>2008</u>	<u>2009</u>
<b><u>Average Cost (in cents per litre) <sup>(1)</sup></u></b>		
Watson Lake	87.48	87.48
Beaver Creek	81.52	81.52
Destruction Bay	83.13	83.13
Old Crow	193.41	193.41
Pelly Crossing	89.33	89.33
Swift River	92.44	92.44
Standby	70.00	70.00
<b>Total Diesel Generation (in MW.h) <sup>(2)</sup></b>	22,364	20,858
<b>Fuel costs (\$000s) <sup>(2)</sup></b>	5,829	5,397

(1) Per GRA Compliance filing Revised Schedule 4.2

(2) Per GRA Compliance filing Revised Schedule 4.1

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It is important to recognize several points regarding the language about “Board-Approved diesel generation volumes.” First, the Board does not specifically approve a diesel generation volume, but instead approves a revenue requirement based on test year forecasts, including forecasts for the quantity of diesel fuel that is expected to be required to meet an approved sales forecast. This is not a limit or constraint on the utilities, and as such it is clear that utilities cannot be constrained (and somehow curtail service, for example) to keep to this volume. The diesel consumption in a given year will be what it has to be in order to provide reliable service to all customers that the utility has an obligation to serve. Further, as noted in response to part (a) of this question the utilities are generally exposed to the cost implications of these variations except where

1 such exposure is limited by an explicitly approved policy – for example, the DCF or the  
2 OIC 1995/90 sec.8 requirement<sup>6</sup>.

3  
4 **(d)**

5  
6 YEC does not prepare its diesel forecast for a GRA at unit level. GRA diesel forecasts  
7 are done at the community level using efficiency rates attained by the current operating  
8 configuration of the units in that community.

9  
10 For volumes and prices for YEC, see part Table 1 for (c) above. The efficiency rates for  
11 YEC by community used for the 2008 and 2009 test years were:

- 12
- 13 • Whitehorse 3.64 kW.h/litre
  - 14
  - 15 • Faro 3.55 kWh/litre
  - 16
  - 17 • Dawson 3.71 kW.h/litre

18  
19 The attached Table 3 and 4 provides the approved YEC GRA forecast diesel generation,  
20 fuel use and fuel cost by month for the 2008 and 2009 test years. Note that the amounts  
21 shown include certain amounts that are not targeted to any specific month. For example,  
22 the 2008 “RFID” represent an amount of fuel that had occurred in 2008 prior to the time  
23 YEC filed that was being charged against the self-insurance reserve and therefore not  
24 included in rates, the amounts shown for Line Maintenance are budgeted to be used to  
25 address diesel generation when transmission lines are taken down for maintenance, but  
26 are not assumed to occur in any given month, and amounts shown for mechanical  
27 maintenance are similar and do not arise due to the need for energy per se, but rather  
28 the need at times to run-up units or for exercise.

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<sup>6</sup> Section 8 provides that “The Board must permit Yukon Energy Corporation and The Yukon Electrical Company Limited to adjust their rates to retail customers, major industrial customers, and isolated industrial customers so as to reflect fluctuations in the prices for which the two utilities pay for diesel fuel, without the requirement for specific application to and approval of the Board.

1 Yukon Electrical does not prepare diesel forecasts by individual unit. The forecast is at  
2 the community level using average efficiency rates according to the units and  
3 configuration in the community.

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5 For YECL 2008/2009 GRA community level volumes, net heat rates, forecast litres  
6 consumed, and total fuel dollars please refer to Tables 5 and 6.

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**Table 3:  
YEC GRA Forecast Diesel Generation by Community and Month – 2008**

Month	2008 GRA Diesel Generation (MWh)					Diesel, litres					Diesel, \$000				
	Total	Whitehorse	Faro	Dawson	Mayo	Total	Whitehorse	Faro	Dawson	Mayo	Total	Whitehorse	Faro	Dawson	Mayo
January	41	36	2	4	-	11,251	9,792	473	986	-	10.8	9.4	0.5	1.0	-
February	93	73	3	17	-	25,442	20,044	887	4,511	-	24.5	19.2	0.9	4.4	-
March	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April	120	-	-	120	-	32,316	-	-	32,316	-	31.5	-	-	31.5	-
May	189	175	11	2	-	51,855	48,140	3,135	581	-	49.9	46.2	3.1	0.6	-
June	39	-	-	39	-	10,588	-	-	10,588	-	10.3	-	-	10.3	-
July	35	-	-	35	-	9,355	-	-	9,355	-	9.1	-	-	9.1	-
August	33	-	-	33	-	8,852	-	-	8,852	-	8.6	-	-	8.6	-
September	36	-	-	36	-	9,652	-	-	9,652	-	9.4	-	-	9.4	-
October	27	-	-	27	-	7,406	-	-	7,406	-	7.2	-	-	7.2	-
November	130	-	100	30	-	36,200	-	28,169	8,031	-	35.8	-	27.9	7.8	-
December	133	-	100	33	-	37,135	-	28,169	8,966	-	36.7	-	27.9	8.7	-
<b>Total</b>	<b>875</b>	<b>284</b>	<b>216</b>	<b>376</b>	<b>-</b>	<b>240,053</b>	<b>77,976</b>	<b>60,834</b>	<b>101,244</b>	<b>-</b>	<b>233.9</b>	<b>74.9</b>	<b>60.3</b>	<b>98.7</b>	<b>-</b>
Less: RFID		175				48,140	48,140				46	46.2			
Add: Line Maintenance	330		330			92,864		92,864			92.1		92.1		
Add: Mechanical Maint.	-					100,725	100,725				96.7	96.7			
<b>Total</b>	<b>1,205</b>	<b>109</b>	<b>546</b>	<b>376</b>	<b>-</b>	<b>385,502</b>	<b>130,561</b>	<b>153,698</b>	<b>101,244</b>	<b>-</b>	<b>376.5</b>	<b>125.3</b>	<b>152.5</b>	<b>98.7</b>	<b>-</b>

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**Table 4:  
YEC GRA Forecast Diesel Generation by Community and Month – 2009**

Month	2009 GRA Diesel Generation (MWh)					Diesel, litres					Diesel, \$000				
	Total	Whitehorse	Faro	Dawson	Mayo	Total	Whitehorse	Faro	Dawson	Mayo	Total	Whitehorse	Faro	Dawson	Mayo
January	137	-	100	37	-	38,035	-	28,169	9,866	-	37.6	-	27.9	9.6	-
February	159	-	125	34	-	44,253	-	35,211	9,042	-	43.7	-	34.9	8.8	-
March	159	-	125	34	-	44,252	-	35,211	9,041	-	43.7	-	34.9	8.8	-
April	31	-	-	31	-	8,474	-	-	8,474	-	8.3	-	-	8.3	-
May	29	-	-	29	-	7,729	-	-	7,729	-	7.5	-	-	7.5	-
June	32	-	-	32	-	8,758	-	-	8,758	-	8.5	-	-	8.5	-
July	36	-	-	36	-	9,607	-	-	9,607	-	9.4	-	-	9.4	-
August	33	-	-	33	-	9,021	-	-	9,021	-	8.8	-	-	8.8	-
September	36	-	-	36	-	9,732	-	-	9,732	-	9.5	-	-	9.5	-
October	29	-	-	29	-	7,949	-	-	7,949	-	7.8	-	-	7.8	-
November	130	-	100	30	-	36,183	-	28,169	8,014	-	35.8	-	27.9	7.8	-
December	134	-	100	34	-	37,317	-	28,169	9,148	-	36.9	-	27.9	8.9	-
<b>Total</b>	<b>945</b>	<b>-</b>	<b>550</b>	<b>395</b>	<b>-</b>	<b>261,311</b>	<b>-</b>	<b>154,930</b>	<b>106,381</b>	<b>-</b>	<b>257.4</b>	<b>-</b>	<b>153.7</b>	<b>103.7</b>	<b>-</b>
Less: RFID															
Add: Line Maintenance	316		316			88,943		88,943			88.3				
Add: Mechanical Maint.	-					100,725	100,725				96.7				
<b>Total</b>	<b>1,260</b>	<b>-</b>	<b>866</b>	<b>395</b>	<b>-</b>	<b>450,979</b>	<b>100,725</b>	<b>243,873</b>	<b>106,381</b>	<b>-</b>	<b>442.4</b>	<b>96.7</b>	<b>242.0</b>	<b>103.7</b>	<b>-</b>

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**Table 5:  
YECL GRA Forecast Diesel Generation by Community and Month – 2008**

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08	Total 2008
<b>GRA FORECAST DOLLARS</b>													
Haines Junction (Standby)	-	21	78	-	-	47	-	21	1,207	131	173	-	1,678
Watson Lake	318,292	346,277	286,951	250,221	235,213	234,584	223,299	234,656	249,991	261,416	288,849	374,853	3,304,603
Beaver Creek	34,082	44,264	36,332	36,927	34,320	43,484	41,667	44,279	33,807	32,699	40,152	40,473	462,485
Destruction Bay	30,619	44,242	36,174	39,365	32,285	30,317	32,535	29,828	32,254	43,668	28,535	39,891	419,714
Old Crow	83,158	89,921	109,231	89,982	78,693	77,071	80,013	76,739	84,614	92,957	99,480	125,827	1,087,685
Stewart Crossing (Standby)	-	220	-	72	-	-	-	-	-	209	-	-	502
Pelly Crossing	42,817	31,447	81,852	39,007	44,089	29,725	29,162	21,816	42,137	50,180	45,027	2,167	459,425
Swift River	9,893	8,194	7,041	8,246	5,931	4,239	7,183	7,451	4,741	6,391	8,168	8,542	86,019
Other (Standby)	-	364	121	-	1,225	-	481	-	447	658	92	3,232	6,620
<b>Total</b>	<b>518,861</b>	<b>564,950</b>	<b>557,780</b>	<b>463,819</b>	<b>431,755</b>	<b>419,467</b>	<b>414,341</b>	<b>414,789</b>	<b>449,198</b>	<b>488,308</b>	<b>510,477</b>	<b>594,987</b>	<b>5,828,731</b>
<b>GRA FORECAST LITRES FUEL</b>													
Haines Junction (Standby)	0	30	111	0	0	67	0	30	1,724	187	248	0	2,397
Watson Lake	363,846	395,836	328,019	286,033	268,876	268,158	255,257	268,240	285,769	298,830	330,188	428,502	3,777,552
Beaver Creek	41,808	54,298	44,568	45,298	42,100	53,341	51,112	54,317	41,470	40,111	49,255	49,648	567,327
Destruction Bay	36,833	53,220	43,515	47,353	38,837	36,470	39,138	35,881	38,800	52,530	34,325	47,987	504,888
Old Crow	42,996	46,493	56,476	46,524	40,687	39,849	41,370	39,677	43,748	48,062	51,435	65,057	562,373
Stewart Crossing (Standby)	0	314	0	103	0	0	0	0	0	299	0	0	717
Pelly Crossing	47,931	35,204	91,628	43,666	49,355	33,276	32,646	24,421	47,170	56,173	50,406	2,426	514,301
Swift River	10,702	8,864	7,617	8,920	6,416	4,585	7,770	8,061	5,129	6,914	8,836	9,241	93,054
Other (Standby)	0	520	173	0	1,750	0	688	0	638	940	132	4,617	9,457
<b>Total</b>	<b>544,115</b>	<b>594,778</b>	<b>572,108</b>	<b>477,896</b>	<b>448,021</b>	<b>435,745</b>	<b>427,981</b>	<b>430,626</b>	<b>464,450</b>	<b>504,045</b>	<b>524,824</b>	<b>607,478</b>	<b>6,032,067</b>
<b>FORECAST NET HEAT RATES (MWh / Litre)</b>													
Haines Junction (Standby)	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
Watson Lake	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82
Beaver Creek	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56
Destruction Bay	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41
Old Crow	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56
Stewart Crossing (Standby)	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
Pelly Crossing	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Swift River	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99
Other (Standby)	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
<b>GRA FORECAST FUEL GENERATION (MWh)</b>													
Haines Junction (Standby)	-	105	390	-	-	235	-	104	6,036	653	867	-	8,389
Watson Lake	1,389,945	1,512,152	1,253,081	1,092,687	1,027,148	1,024,402	975,120	1,024,716	1,091,680	1,141,574	1,261,368	1,636,942	14,430,816
Beaver Creek	148,925	193,418	158,759	161,357	149,966	190,008	182,070	193,485	147,723	142,883	175,452	176,855	2,020,899
Destruction Bay	125,617	181,504	148,406	161,497	132,452	124,379	133,479	122,370	132,326	179,152	117,065	163,657	1,721,906
Old Crow	153,262	165,726	201,314	165,837	145,032	142,043	147,465	141,430	155,944	171,320	183,344	231,901	2,004,618
Stewart Crossing (Standby)	-	1,099	-	362	-	-	-	-	-	1,046	-	-	2,508
Pelly Crossing	173,662	127,549	331,988	158,209	178,823	120,565	118,281	88,484	170,907	203,527	182,629	8,790	1,863,415
Swift River	32,016	26,518	22,788	26,685	19,194	13,717	23,246	24,114	15,345	20,684	26,433	27,644	278,384
Other (Standby)	-	1,819	606	-	6,124	-	2,407	-	2,235	3,288	461	16,161	33,101
<b>Total</b>	<b>2,023,428</b>	<b>2,209,891</b>	<b>2,117,331</b>	<b>1,766,635</b>	<b>1,658,738</b>	<b>1,615,350</b>	<b>1,582,068</b>	<b>1,594,703</b>	<b>1,722,195</b>	<b>1,864,128</b>	<b>1,947,620</b>	<b>2,261,950</b>	<b>22,364,037</b>

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**Table 6:**  
**YECL GRA Forecast Diesel Generation by Community and Month – 2009**

	Jan 09	Feb 09	Mar 09	Apr 09	May 09	Jun 09	Jul 09	Aug 09	Sep 09	Oct 09	Nov 09	Dec 09	Total 2009
<b>GRA FORECAST DOLLARS</b>													
Haines Junction (Standby)	484	-	-	-	-	-	-	283	-	54	146	711	1,678
Watson Lake	332,713	304,873	313,964	248,187	239,104	202,922	190,689	235,173	249,231	311,486	285,848	362,005	3,276,194
Beaver Creek	45,170	49,468	32,855	35,740	35,019	44,422	38,477	44,607	39,856	37,867	33,445	37,058	483,985
Destruction Bay	49,548	29,600	38,001	36,824	32,908	30,976	29,564	31,588	32,373	32,530	38,851	41,539	424,302
Old Crow	126,263	82,533	113,656	92,643	78,668	80,115	70,135	74,697	81,415	105,097	75,338	120,576	1,101,136
Stewart Crossing (Standby)	-	-	-	-	-	-	-	502	-	-	-	-	502
Pelly Crossing	455	63	-	13	-	65	23	1,066	-	962	23	44	2,712
Swift River	10,883	9,955	10,751	8,855	6,876	7,408	7,266	7,439	7,100	7,646	8,709	7,712	100,600
Other (Standby)	1,935	217	50	231	45	38	604	1,632	-	1,293	515	59	6,620
<b>Total</b>	<b>567,451</b>	<b>476,710</b>	<b>509,276</b>	<b>422,493</b>	<b>392,620</b>	<b>365,947</b>	<b>336,758</b>	<b>396,988</b>	<b>409,976</b>	<b>496,935</b>	<b>442,874</b>	<b>579,703</b>	<b>5,397,730</b>
<b>GRA FORECAST LITRES FUEL</b>													
Haines Junction (Standby)	692	0	0	0	0	0	0	404	0	77	208	1,015	2,397
Watson Lake	380,331	348,506	358,898	283,707	273,324	269,400	255,417	268,831	284,900	356,065	326,758	413,814	3,819,952
Beaver Creek	55,409	60,682	40,303	43,843	42,957	54,492	47,200	54,720	48,891	46,451	41,026	57,726	593,701
Destruction Bay	59,603	35,607	45,712	44,297	39,587	37,263	35,564	37,999	38,942	39,131	46,735	49,968	510,408
Old Crow	65,283	42,673	58,764	47,900	40,674	41,422	36,263	38,621	42,095	54,339	38,952	62,342	569,328
Stewart Crossing (Standby)	0	0	0	0	0	0	0	717	0	0	0	0	717
Pelly Crossing	509	70	0	14	0	73	25	1,194	0	1,077	26	49	3,036
Swift River	11,773	10,770	11,630	9,579	7,439	8,014	7,860	8,048	7,681	8,271	9,421	8,342	108,827
Other (Standby)	2,764	311	71	330	65	55	863	2,332	0	1,847	736	84	9,457
<b>Total</b>	<b>576,363</b>	<b>498,618</b>	<b>515,379</b>	<b>429,669</b>	<b>404,045</b>	<b>410,719</b>	<b>383,192</b>	<b>412,864</b>	<b>422,510</b>	<b>507,259</b>	<b>463,863</b>	<b>593,342</b>	<b>5,617,823</b>
<b>FORECAST NET HEAT RATES (MWh / Litre)</b>													
Haines Junction (Standby)	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
Watson Lake	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82
Beaver Creek	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56
Destruction Bay	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41
Old Crow	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56
Stewart Crossing (Standby)	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
Pelly Crossing	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Swift River	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99
Other (Standby)	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
<b>GRA FORECAST FUEL GENRATION (MWh)</b>													
Haines Junction (Standby)	2,422	-	-	-	-	-	-	1,414	-	270	729	3,554	8,390
Watson Lake	1,452,920	1,331,345	1,371,046	1,083,805	1,044,140	1,029,150	975,731	1,026,974	1,088,362	1,360,222	1,248,263	1,580,832	14,592,791
Beaver Creek	197,376	216,157	143,567	156,174	153,019	194,110	168,132	194,919	174,158	165,466	146,142	205,629	2,114,848
Destruction Bay	203,275	121,438	155,900	151,073	135,009	127,083	121,290	129,594	132,811	133,456	159,388	170,415	1,740,731
Old Crow	232,705	152,109	209,470	170,742	144,986	147,653	129,260	137,667	150,050	193,696	138,849	222,224	2,029,409
Stewart Crossing (Standby)	-	-	-	-	-	-	-	2,510	-	-	-	-	2,510
Pelly Crossing	1,844	254	-	51	-	263	91	4,325	-	3,901	93	177	11,000
Swift River	35,219	32,219	34,792	28,657	22,254	23,975	23,514	24,076	22,979	24,745	28,184	24,957	325,571
Other (Standby)	9,673	1,087	248	1,155	226	192	3,021	8,161	-	6,465	2,577	295	33,100
<b>Total</b>	<b>2,135,434</b>	<b>1,854,609</b>	<b>1,915,022</b>	<b>1,591,655</b>	<b>1,499,633</b>	<b>1,522,426</b>	<b>1,421,040</b>	<b>1,529,640</b>	<b>1,568,360</b>	<b>1,888,221</b>	<b>1,724,225</b>	<b>2,208,082</b>	<b>20,858,348</b>

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1 **(e)**

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3 Please see part (c) above. The Companies do not require or use any “Board-  
4 approved” diesel generation volume forecast for non-test years. The forecasts for  
5 diesel required for each year are prepared in advance of the year based on the  
6 normal business planning process, including consideration of forecast loads for the  
7 year in question, recent unit efficiency rates, any relevant expected maintenance  
8 schedules, etc.

9

10 **(f)**

11

12 For YECL please see Attachment 1 to this response.

13

14 For YEC please see summary provided in Tables 7 and 8 below and Attachment 2  
15 to this response for the related excel sheet (which provides further detail by  
16 community). These tables exclude diesel generation charged to Maintenance.

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**Table 7:  
YEC GRA Approved Diesel Fuel Consumption for 2008-2009  
at GRA approved Fuel Prices and Actual Fuel Prices**

YEC Diesel Fuel Consumption for years 2008-2011

YEC's 2009 GRA Diesel Fuel Consumption

Month	2008			2009		
	GRA (litres) <sup>1</sup>	at GRA Approved Prices (\$)	at Actual Prices (\$)	GRA (litres)	at GRA Approved Prices (\$)	at Actual Prices (\$)
January	11,251	10,831	9,374	38,035	37,563	34,177
February	25,442	24,521	20,789	44,253	43,746	38,012
March	-	-	363	44,252	43,745	38,010
April	32,316	31,508	28,349	8,474	8,262	7,631
May	51,855	49,890	43,422	7,729	7,536	6,926
June	10,588	10,323	10,674	8,758	8,539	7,926
July	9,355	9,121	11,458	9,607	9,367	8,651
August	8,852	8,631	10,840	9,021	8,795	8,123
September	9,652	9,411	11,821	9,732	9,489	8,754
October	7,406	7,221	9,069	7,949	7,750	6,953
November	36,200	35,774	42,963	36,183	35,757	29,506
December	37,135	36,685	44,106	37,317	36,863	30,497
<b>Annual Total</b>	<b>240,053</b>	<b>233,916</b>	<b>243,229</b>	<b>261,311</b>	<b>257,412</b>	<b>225,167</b>

Less: RFID	48,140	46,214			
Add: Line Maintenance	92,864	92,121		88,943	88,232
Add: Mechanical Main.	100,725	96,696		100,725	96,696
<b>Total GRA</b>	<b>385,503</b>	<b>376,520</b>	Note 2	<b>450,979</b>	<b>442,339</b>

Notes:

1. Based on 2009 GRA Diesel Efficiency.
2. Compliance Filing per Board Order 2009-8, Appendix 3.1, Schedule 12, Line 12.
3. Compliance Filing per Board Order 2009-8, Appendix 3.2, Schedule 12, Line 12.

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**Table 8:  
YEC Actual Diesel Generation Fuel Use at Approved  
GRA Prices and Actual Prices: 2008 to 2011 to Date**

Actual Diesel Fuel Consumption (litres)

Month	2008			2009			2010			2011 (ytd)		
	Actual (litres)	at GRA Approved Prices (\$)	at Actual Prices (\$)	Actual (litres)	at GRA Approved Prices (\$)	at Actual Prices (\$)	Actual (litres)	at GRA Approved Prices (\$)	at Actual Prices (\$)	Actual (litres)	at GRA Approved Prices (\$)	at Actual Prices (\$)
January	11,684	11,276	8,915	208,156	200,413	171,877	45,607	43,923	38,224	603,369	585,255	563,873
February	26,402	25,418	20,789	33,849	32,659	28,461	15,221	14,707	12,600	348,553	338,036	335,131
March	477	466	363	2,192	2,134	2,001	4,373	4,322	3,569	843,969	816,726	867,587
April	29,909	29,133	28,154	11,954	11,774	9,633	44,212	43,035	39,922	449,810	437,891	482,113
May	51,150	49,219	43,422	41,355	40,008	32,268	9,465	8,677	7,564	211,552	205,543	228,749
June	11,267	10,979	10,674	3,266	3,226	2,671	10,334	10,080	8,612	283,791	275,846	282,374
July	629	618	590	77,032	74,168	60,998	79,563	76,690	65,664	143,558	138,950	139,506
August	2,094	2,060	1,870	58,751	58,193	47,009	193,390	187,698	169,443	142,474	137,554	140,918
September	7,373	7,177	6,927	100,675	97,845	88,012	35,294	34,240	30,198	139,617	135,996	146,145
October	88,698	85,963	85,066	40,000	39,349	29,097	75,453	73,584	63,628	-	-	-
November	12,772	12,536	12,320	20,503	19,818	16,290	149,100	145,365	136,288	-	-	-
December	212,183	204,233	208,321	118,344	113,632	87,603	767,592	742,637	703,186	-	-	-
<b>Annual Total</b>	<b>454,638</b>	<b>439,078</b>	<b>427,412</b>	<b>716,077</b>	<b>693,219</b>	<b>575,921</b>	<b>1,429,604</b>	<b>1,384,958</b>	<b>1,278,899</b>	<b>3,166,693</b>	<b>3,071,797</b>	<b>3,186,396</b>

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1 **(g)**

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3 Please see LE-YEC/YECL-1-4 REVISED and LE-YEC/YECL-1-7 REVISED for  
4 examples and the basic explanation requested. In the absence of any price  
5 variance from GRA approved fuel prices, the examples show that the Companies  
6 are fully at risk for changes in the volume of diesel fuel from GRA forecasts.

7

8 **(h) and (i)**

9

10 The DFPVA has been in existence since at least 1988 when it was encapsulated in  
11 the Government of Yukon rate policy directive. Please see provided as  
12 **Attachment 1** historic and current OIC rate directions related to Rider F (OIC  
13 1988-150; OIC 1991-62 and OIC 1995-90). As a result, the Board has not been  
14 required or authorized to issue “approvals” per se for Rider F charges or changes.

15

16 A Rider F Rate Schedule was filed by the Companies in the 1989/90 GRA and  
17 approved in Order 1989-2. (See **Attachment 2** for excerpt from 1989/90 GRA  
18 filing; related IRs which provide Sample calculation of proposed fuel cost rider  
19 (Item BD-22) and excerpts from Board Order 1989-1 and 1989-2 providing interim  
20 approval of rates and Order 1990-2 providing final rates. This package also  
21 provides excerpt from Order 1989-5).

22

23 The sample calculation for the fuel cost rider was provided in BD-22 from the  
24 1989/90 GRA demonstrates that the DFPVA variances from the outset were based  
25 on applying the difference between the actual and GRA approved fuel cost to the  
26 actual volumes of fuel required.

27

28 • The first group (rows 1 to 6) provides the GRA forecast information relevant  
29 to calculating the forecast fuel cost in cents per kWh and total dollars.

30

31 • The second group (rows 7 to 12) provides the Actual information relevant to  
32 calculating the actual fuel cost.

33

34 • The third group (rows 13 to 18) provides the calculation to provide the price  
35 variance that informs the Rider F fuel cost rider. In this case, the calculation

1 is based on taking the difference between the actual fuel price cost (based  
2 on actual generation) and the forecast fuel price cost applied to the actual  
3 volume.

4

- 5 • The response also shows that calculation of the Rider F to be charged on a  
6 go forward basis is to be calculated using the new forecast of sales for the  
7 following year.

8

9 Full copies of all Board Orders are available on the Board’s website at the following  
10 address:

11

12 <http://yukonutilitiesboard.yk.ca/policy/orders/1980s/>

13

14 According to the current policy and practice, when Rider F has been adjusted the  
15 Companies have filed Rider F advisories with the YUB for information. These  
16 advisory filings have illustrated that the actual diesel fuel consumed or forecast to  
17 be consumed (as opposed to fuel consumption levels approved at the last GRA)  
18 have been used in the calculation of the DFPVA balance and subsequent Rider F  
19 adjustments. Specifically, the advisories set out the Approved Fuel Price in Rates,  
20 the Actual (“Forecast Fuel Price”) and Actual litres (“Forecast Litres”) in order to  
21 calculate the Rider F shortfall each month going forward. From time to time the  
22 Board has requested additional information and this has been provided.

23

24 In Order 2003-3 (provided as **Attachment 3**) the Board noted that “Rider F exists  
25 as a consequence of Order-in-Council 1995/90, issued in 1995 as a rate directive  
26 to the Board”. The Board’s Order also set out the following understandings  
27 regarding Rider F policies and procedures regarding the issues raised in this IR.

28

- 29 • “Rider F is a fuel adjustment rider in the tariffs originally filed by YEC and  
30 YECL and approved by the Board”.

31

- 32 • “Rider F is designed to adjust rates for actual diesel fuel price differences  
33 vs. the fuel price implicit in rates. YEC and YECL periodically check to see  
34 if the existing rider will be sufficient to recover price shortfalls over a  
35 reasonable period given updated diesel consumption, price and sales

1 forecasts. They then decide whether it is practical to make a change and  
2 inform the Board of a fuel price adjustment designed to recover the  
3 deficiency (or surplus) over the next year”.  
4

5 In the Board Order regarding the YECL 2008/2009 GRA (Order 2009-2), the Board  
6 approved the continued use of the Deferred Fuel Price Account as applied for by  
7 YECL, noting (at page 12 of 49), “The Board agrees that YECL’s proposal to  
8 continue a diesel fuel price rider deferral account, in order to address differences  
9 between forecast and actual fuel prices, is reasonable and appropriate.”  
10

11 Similarly, in the Board Order regarding the YEC 2008/2009 GRA (Order 2009-8)  
12 the Board approved the continued use of the Deferred Fuel Price Account as  
13 applied for by YEC. The following is noted in this regard:  
14

- 15 • The Board noted at page 19 that “in accordance with section 8 of OIC  
16 1995/90, the Deferral Fuel Price Account on Rider F was created. This  
17 deferral account records the variance in consumed fuel prices, on a per litre  
18 basis, relative to the most recent GRA approved fuel prices. In addition, on  
19 a quarterly basis, YEC credits the account with all variations (positive or  
20 negative) to the process of secondary sales relative to the most recent GRA  
21 approved price.”  
22
- 23 • The Board’s discussion at footnote 58 referenced the YEC application at  
24 page 3-21. This section of the application notes as follows:  
25

26 **The Deferred Fuel Price Account (or “Rider F”) established**  
27 **pursuant to Order in Council 1995/90 section 8.** This account  
28 captures all variations in fuel price per litre for each actual litre  
29 consumed, compared to the most recent GRA-approved fuel prices.  
30 Pursuant to Board Order 2005-12, Yukon Energy also credits this  
31 account with all variations (positive or negative) in the ongoing  
32 quarterly adjustment to the prices of secondary sales, compared to  
33 the most recent GRA-approved price. As with the typical situation  
34 where final rates are put in place following the start of the test year,  
35 once final approvals are received for new test Year fuel prices,

1 Yukon Energy recalculates the balances in these accounts to  
2 ensure that all charges to the accounts are precisely equal to what  
3 would have occurred had the ultimate YUB approvals been known  
4 at the start of the first test year.”

5

6 **(j)**

7

8 Please see Attachment 1 to this response. The Rider F Fuel Adjustment Rate  
9 Schedule (effective July 1, 2011) provides that the Rider is applicable to all classes  
10 of service throughout the Yukon Territory (except for Rate Schedule 32 Secondary  
11 Energy). Accordingly the same rider applies to all Yukon Energy or Yukon  
12 Electrical firm power customers whether they are served on the grid or in the  
13 isolated communities.

14

15 **(k)**

16

17 To be clear, the diesel fuel price variance adjustments posted to the DFPVA are  
18 determined with regard to all diesel generation by the Companies throughout  
19 Yukon, including all Diesel Rate Zone communities, WAF and MD.

20

21 **(l)**

22

23 In response to the question, the Companies' view is that such an approach would  
24 not be advisable, nor address the requirements of the OIC. Also see LE-  
25 YEC/YECL-1-7 REVISED.

26

27 In particular, such an approach would not permit the Companies to adjust their  
28 rates so as to reflect the “fluctuations in the prices for which the two utilities pay for  
29 diesel fuel” which is the explicit requirement of the OIC. Further, such an approach  
30 is unprecedented in all Canadian regulatory experience reviewed by the  
31 Companies and the related direction set out in Section 3 of OIC 1995/90. Finally,  
32 such an approach would not be consistent with the risk distribution between the  
33 Companies and ratepayers that has existed for more than 2 decades, including the  
34 basis on which the two utilities have established their revenue requirements and  
35 had their risk profile reviewed by experts and the Board.

1 In order to ensure fuel price risk is fully addressed by the fuel price variance  
2 mechanism in Yukon (and in all other jurisdictions where fuel price risk is handled  
3 outside of the setting of the normal regulated rate) it must apply to all volumes of  
4 fuel consumed. The required mechanism would be ineffective for this purpose if it  
5 applied only to the forecast fuel.

6

7 **(m) and (n)**

8

9 See response to (l) above. With regard to “m”, the suggested approach would not  
10 reflect best current information and thus not set the best potential rate to do what is  
11 sought (i.e., deal with balance in a 6 or 12 month period – specifically, the  
12 downside of the suggested approach is that, to the extent actual sales differ from  
13 forecast, actual collection/refund would differ from forecast and affect the ability to  
14 balance the fund within expected timeframe (typically 6-12 months). However, so  
15 long as the mechanism ultimately recovers/refunds all DFPVA balances from  
16 customers, as set out in part (l) above (i.e., including all fluctuations in price for fuel  
17 purchased by the utilities), such an approach to setting the Rider F rider value  
18 (using last GRA forecast sales as the divisor) does not by itself prevent  
19 implementation of OIC 1995/90 directions on this matter.



**Yukon Electrical Company Limited**  
**Approved Diesel Fuel Consumption Comparison**  
**GRA-forecast price versus Actual fuel price**  
**2008**

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08	Total 2008
<b>GRA FORECAST LITRES FUEL</b>													
Haines Junction (Standby)	0	30	111	0	0	67	0	30	1,724	187	248	0	2,397
Watson Lake	363,846	395,836	328,019	286,033	268,876	268,158	255,257	268,240	285,769	298,830	330,188	428,502	3,777,552
Beaver Creek	41,808	54,298	44,568	45,298	42,100	53,341	51,112	54,317	41,470	40,111	49,255	49,648	567,327
Destruction Bay	36,833	53,220	43,515	47,353	38,837	36,470	39,138	35,881	38,800	52,530	34,325	47,987	504,888
Old Crow	42,996	46,493	56,476	46,524	40,687	39,849	41,370	39,677	43,748	48,062	51,435	65,057	562,373
Stewart Crossing (Standby)	0	314	0	103	0	0	0	0	0	299	0	0	717
Pelly Crossing (Note 1)	47,931	35,204	91,628	43,666	49,355	33,276	32,646	24,421	47,170	56,173	50,406	2,426	514,301
Swift River	10,702	8,864	7,617	8,920	6,416	4,585	7,770	8,061	5,129	6,914	8,836	9,241	93,054
Other (Standby - Note 2)	0	520	173	0	1,750	0	688	0	638	940	132	4,617	9,457
<b>Total</b>	<b>544,115</b>	<b>594,778</b>	<b>572,108</b>	<b>477,896</b>	<b>448,021</b>	<b>435,745</b>	<b>427,981</b>	<b>430,626</b>	<b>464,450</b>	<b>504,045</b>	<b>524,824</b>	<b>607,478</b>	<b>6,032,067</b>
<b>ACTUAL FUEL CENTS/LITRE</b>													
Haines Junction (Standby)	0.0000	0.8727	0.8727	0.0000	0.0000	0.8727	0.0000	0.8727	0.4214	1.2074	1.2074	0.0000	
Watson Lake	0.8698	0.8734	0.9814	1.0420	1.1030	1.1569	1.1831	1.1162	1.0823	1.0409	0.9222	0.7509	
Beaver Creek	0.8685	0.8415	0.8960	0.9694	1.0030	1.0894	1.1371	1.1241	1.1027	1.0877	1.0592	0.9190	
Destruction Bay	0.8899	0.8583	0.9194	0.9940	1.0273	1.1141	1.1621	1.1619	1.1185	1.0943	1.0585	0.8958	
Old Crow	1.8329	1.8329	1.8329	2.0586	2.0116	2.1469	2.1464	2.1494	2.1324	2.1325	2.1198	1.8169	
Stewart Crossing (Standby)	0.0000	0.7192	0.0000	0.7190	0.0000	0.0000	0.0000	0.0000	0.0000	0.7192	0.0000	0.0000	
Pelly Crossing	0.9314	0.9142	0.9766	1.0062	1.1045	1.2176	1.1940	1.1694	1.1272	1.1384	1.0776	1.0108	
Swift River	0.9355	0.9274	0.9275	1.0894	1.0656	1.1754	1.2597	1.2182	1.1327	1.1219	1.1295	0.9433	
Other (Standby)	0.0000	0.3301	0.7639	0.0000	0.7267	0.0000	0.6793	0.0000	0.3301	0.6577	0.7682	0.6385	
<b>GRA FORECAST FUEL CENTS/LITRE</b>													
Haines Junction (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	
Watson Lake	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	
Beaver Creek	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	
Destruction Bay	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	
Old Crow	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	
Stewart Crossing (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	
Pelly Crossing	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	
Swift River	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	
Other (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	
<b>FORECAST FUEL (Note 1) * (PRICE: GRA - ACTUAL)</b>													
Haines Junction (Standby)	-	(5)	(19)	-	-	(12)	-	(5)	481	(95)	(126)	-	219
Watson Lake	1,835	540	(34,957)	(47,837)	(61,368)	(75,659)	(78,703)	(64,749)	(59,301)	(49,640)	(15,642)	53,086	(432,394)
Beaver Creek	(2,227)	(1,430)	(3,603)	(6,986)	(7,907)	(14,629)	(16,452)	(16,780)	(11,924)	(10,931)	(12,020)	(5,152)	(110,040)
Destruction Bay	(2,160)	(1,436)	(3,835)	(7,706)	(7,610)	(10,313)	(12,947)	(11,861)	(11,143)	(13,815)	(7,798)	(3,094)	(93,719)
Old Crow	4,349	4,703	5,713	(5,794)	(3,154)	(8,480)	(8,783)	(8,541)	(8,675)	(9,538)	(9,551)	7,622	(40,128)
Stewart Crossing (Standby)	-	(6)	-	(2)	-	-	-	-	-	(6)	-	-	(14)
Pelly Crossing (Note 1)	(1,828)	(737)	(7,629)	(4,929)	(10,424)	(10,793)	(9,817)	(6,744)	(11,033)	(13,770)	(9,291)	(285)	(87,280)
Swift River	(119)	(26)	(24)	(1,472)	(906)	(1,151)	(2,605)	(2,368)	(1,069)	(1,365)	(1,812)	(175)	(13,092)
Other (Standby - Note 2)	-	192	(11)	-	(47)	-	14	-	236	40	(9)	284	700
<b>Total</b>	<b>(149)</b>	<b>1,795</b>	<b>(44,365)</b>	<b>(74,725)</b>	<b>(91,416)</b>	<b>(121,036)</b>	<b>(129,293)</b>	<b>(111,048)</b>	<b>(102,427)</b>	<b>(99,120)</b>	<b>(56,249)</b>	<b>52,286</b>	<b>(775,747)</b>

**Note:**

(1) Pelly Crossing reverted to Standby after cutover to the Grid in December 2008.

(2) Other Standby include: Ross River, Teslin, & Carmacks

**Yukon Electrical Company Limited**  
**Approved Diesel Fuel Consumption Comparison**  
**GRA-forecast price versus Actual fuel price**  
**2009**

	Jan 09	Feb 09	Mar 09	Apr 09	May 09	Jun 09	Jul 09	Aug 09	Sep 09	Oct 09	Nov 09	Dec 09	Total 2009
<b>GRA FORECAST LITRES FUEL</b>													
Haines Junction (Standby)	692	0	0	0	0	0	0	404	0	77	208	1,015	2,397
Watson Lake	380,331	348,506	358,898	283,707	273,324	269,400	255,417	268,831	284,900	356,065	326,758	413,814	3,819,952
Beaver Creek	55,409	60,682	40,303	43,843	42,957	54,492	47,200	54,720	48,891	46,451	41,026	57,726	593,701
Destruction Bay	59,603	35,607	45,712	44,297	39,587	37,263	35,564	37,999	38,942	39,131	46,735	49,968	510,408
Old Crow	65,283	42,673	58,764	47,900	40,674	41,422	36,263	38,621	42,095	54,339	38,952	62,342	569,328
Stewart Crossing (Standby)	0	0	0	0	0	0	0	717	0	0	0	0	717
Pelly Crossing	509	70	0	14	0	73	25	1,194	0	1,077	26	49	3,036
Swift River	11,773	10,770	11,630	9,579	7,439	8,014	7,860	8,048	7,681	8,271	9,421	8,342	108,827
Other (Standby)	2,764	311	71	330	65	55	863	2,332	0	1,847	736	84	9,457
<b>Total</b>	<b>576,363</b>	<b>498,618</b>	<b>515,379</b>	<b>429,669</b>	<b>404,045</b>	<b>410,719</b>	<b>383,192</b>	<b>412,864</b>	<b>422,510</b>	<b>507,259</b>	<b>463,863</b>	<b>593,342</b>	<b>5,617,823</b>
<b>ACTUAL FUEL CENTS/LITRE</b>													
Haines Junction (Standby)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Watson Lake	0.7200	0.6504	0.6042	0.6080	0.6053	0.6563	0.6635	0.6909	0.6807	0.7098	0.7376	0.7346	0.7346
Beaver Creek	0.8666	0.8720	0.7802	0.7728	0.7381	0.7646	0.7923	0.8239	0.8322	0.8287	0.8865	0.8808	0.8808
Destruction Bay	0.8456	0.8664	0.7781	0.7531	0.7143	0.7655	0.7759	0.7987	0.8238	0.8088	0.8764	0.8722	0.8722
Old Crow	1.8259	1.8259	1.5008	1.5478	1.5424	1.4952	1.6392	1.6392	1.6190	1.6403	1.6403	1.7078	1.7078
Stewart Crossing (Standby)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.7190	0.0000	0.0000	0.0000	0.0000	0.0000
Pelly Crossing	1.0180	1.1032	0.0000	1.0498	0.0000	1.0490	0.9918	0.8830	0.0000	0.8718	0.8718	0.8719	0.8719
Swift River	0.8524	0.8524	0.7314	0.7253	0.6637	0.6676	0.6682	0.6868	0.6868	0.7267	0.7267	0.7757	0.7757
Other (Standby)	0.8233	0.7923	0.6740	0.7267	0.6856	0.7923	0.7804	0.7794	0.0000	0.7916	0.8066	0.7767	0.7767
<b>GRA FORECAST FUEL CENTS/LITRE</b>													
Haines Junction (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000
Watson Lake	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748
Beaver Creek	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152
Destruction Bay	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313
Old Crow	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341
Stewart Crossing (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000
Pelly Crossing	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933
Swift River	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244
Other (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000
<b>FORECAST FUEL (Note 1) * (PRICE: GRA - ACTUAL)</b>													
Haines Junction (Standby)	484	-	-	-	-	-	-	283	-	54	146	711	1,678
Watson Lake	58,892	78,195	97,135	75,703	73,650	58,874	53,975	49,432	55,305	58,742	44,817	58,022	762,742
Beaver Creek	(2,850)	(3,446)	1,412	1,858	3,313	2,759	1,083	(476)	(831)	(626)	(2,925)	(3,789)	(4,519)
Destruction Bay	(853)	(1,250)	2,431	3,464	4,631	2,451	1,970	1,238	293	882	(2,109)	(2,044)	11,103
Old Crow	7,066	4,619	25,462	18,502	15,932	18,179	10,693	11,389	13,264	15,966	11,445	14,108	166,625
Stewart Crossing (Standby)	-	-	-	-	-	-	-	(14)	-	-	-	-	(14)
Pelly Crossing	(63)	(15)	-	(2)	-	(11)	(2)	12	-	23	1	1	(57)
Swift River	848	776	2,244	1,907	1,940	2,058	2,014	1,912	1,825	1,635	1,862	1,241	20,263
Other (Standby)	(341)	(29)	2	(9)	1	(5)	(69)	(185)	-	(169)	(79)	(6)	(889)
<b>Total</b>	<b>63,184</b>	<b>78,850</b>	<b>128,686</b>	<b>101,423</b>	<b>99,466</b>	<b>84,305</b>	<b>69,663</b>	<b>63,592</b>	<b>69,857</b>	<b>76,505</b>	<b>53,158</b>	<b>68,243</b>	<b>956,932</b>

**Yukon Electrical Company Limited**  
**Approved Diesel Fuel Consumption Comparison**  
**GRA-forecast price versus Actual fuel price**  
**2010**

	Jan 10	Feb 10	Mar 10	Apr 10	May 10	Jun 10	Jul 10	Aug 10	Sep 10	Oct 10	Nov 10	Dec 10	Total 2010
<b>GRA FORECAST LITRES FUEL</b>													
Haines Junction (Standby)	692	0	0	0	0	0	0	404	0	77	208	1,015	2,397
Watson Lake	380,331	348,506	358,898	283,707	273,324	269,400	255,417	268,831	284,900	356,065	326,758	413,814	3,819,952
Beaver Creek	55,409	60,682	40,303	43,843	42,957	54,492	47,200	54,720	48,891	46,451	41,026	57,726	593,701
Destruction Bay	59,603	35,607	45,712	44,297	39,587	37,263	35,564	37,999	38,942	39,131	46,735	49,968	510,408
Old Crow	65,283	42,673	58,764	47,900	40,674	41,422	36,263	38,621	42,095	54,339	38,952	62,342	569,328
Stewart Crossing (Standby)	0	0	0	0	0	0	0	717	0	0	0	0	N/A
Pelly Crossing	509	70	0	14	0	73	25	1,194	0	1,077	26	49	3,036
Swift River	11,773	10,770	11,630	9,579	7,439	8,014	7,860	8,048	7,681	8,271	9,421	8,342	108,827
Other (Standby)	2,764	311	71	330	65	55	863	2,332	0	1,847	736	84	12,571
<b>Total</b>	<b>576,363</b>	<b>498,618</b>	<b>515,379</b>	<b>429,669</b>	<b>404,045</b>	<b>410,719</b>	<b>383,192</b>	<b>412,864</b>	<b>422,510</b>	<b>507,259</b>	<b>463,863</b>	<b>593,342</b>	<b>5,617,824</b>
<b>ACTUAL FUEL CENTS/LITRE</b>													
Haines Junction (Standby)	1.2076	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.2075	0.0000	1.2076	1.0010	0.0000	
Watson Lake	0.7522	0.7175	0.7281	0.7458	0.7253	0.7130	0.6997	0.7141	0.7391	0.7906	0.8322	0.8784	
Beaver Creek	0.8985	0.8719	0.8698	0.8615	0.8608	0.8281	0.8188	0.8369	0.8473	0.8689	0.9607	1.0180	
Destruction Bay	0.8915	0.8662	0.8707	0.8555	0.8524	0.8318	0.8251	0.8349	0.8339	0.9040	0.9468	1.0031	
Old Crow	1.7109	1.7109	1.6948	1.6972	1.6965	1.6982	1.7187	1.7187	1.7166	1.7166	1.7166	1.7916	
Stewart Crossing (Standby)	0.0000	0.7192	0.0000	0.0000	0.0000	0.7191	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Pelly Crossing	0.0000	0.0000	0.8719	0.0000	0.0000	0.0000	0.0000	0.7557	0.0000	0.7557	0.0000	0.0000	
Swift River	0.7775	0.7775	0.7911	0.7911	0.7764	0.7764	0.7774	0.7910	0.7910	0.7910	0.8706	0.9224	
Other (Standby)	0.7207	0.7505	0.7791	0.8297	0.7141	0.7626	0.8078	0.8282	0.0000	0.6856	0.7792	0.7792	
<b>GRA FORECAST FUEL CENTS/LITRE</b>													
Haines Junction (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	
Watson Lake	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	
Beaver Creek	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	
Destruction Bay	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	
Old Crow	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	
Stewart Crossing (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	
Pelly Crossing	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	
Swift River	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	
Other (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	
<b>FORECAST FUEL (Note 1) * (PRICE: GRA - ACTUAL)</b>													
Haines Junction (Standby)	(351)	-	-	-	-	-	-	(205)	-	(39)	(63)	711	53
Watson Lake	46,635	54,822	52,645	36,607	40,861	43,576	44,723	43,189	38,665	29,982	13,934	(1,479)	444,161
Beaver Creek	(4,617)	(3,440)	(2,199)	(2,030)	(1,961)	(700)	(170)	(1,185)	(1,571)	(2,495)	(5,970)	(11,705)	(38,043)
Destruction Bay	(3,589)	(1,242)	(1,802)	(1,072)	(834)	(17)	221	(135)	(102)	(2,845)	(5,398)	(8,583)	(25,398)
Old Crow	14,568	9,523	14,061	11,346	9,663	9,772	7,813	8,321	9,155	11,818	8,472	8,885	123,395
Stewart Crossing (Standby)	-	-	-	-	-	-	-	502	-	-	-	-	502
Pelly Crossing	455	63	-	13	-	65	23	164	-	148	23	44	996
Swift River	1,730	1,582	1,550	1,276	1,101	1,186	1,155	1,074	1,025	1,104	506	16	13,305
Other (Standby)	(57)	(16)	(6)	(43)	(1)	(3)	(93)	(299)	-	27	(58)	(7)	(556)
<b>Total</b>	<b>54,774</b>	<b>61,292</b>	<b>64,249</b>	<b>46,096</b>	<b>48,829</b>	<b>53,879</b>	<b>53,672</b>	<b>51,425</b>	<b>47,172</b>	<b>37,700</b>	<b>11,446</b>	<b>(12,118)</b>	<b>518,416</b>

**Yukon Electrical Company Limited**  
**Approved Diesel Fuel Consumption Comparison**  
**GRA-forecast price versus Actual fuel price**  
**2011**

	Jan 11	Feb 11	Mar 11	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	YTD 2011
<b>GRA FORECAST LITRES FUEL</b>										
Haines Junction (Standby)	692	0	0	0	0	0	0	404	0	1,096
Watson Lake	380,331	348,506	358,898	283,707	273,324	269,400	255,417	268,831	284,900	2,723,315
Beaver Creek	55,409	60,682	40,303	43,843	42,957	54,492	47,200	54,720	48,891	448,497
Destruction Bay	59,603	35,607	45,712	44,297	39,587	37,263	35,564	37,999	38,942	374,574
Old Crow	65,283	42,673	58,764	47,900	40,674	41,422	36,263	38,621	42,095	413,694
Stewart Crossing (Standby)	0	0	0	0	0	0	0	717	0	717
Pelly Crossing	509	70	0	14	0	73	25	1,194	0	1,885
Swift River	11,773	10,770	11,630	9,579	7,439	8,014	7,860	8,048	7,681	82,793
Other (Standby)	2,764	311	71	330	65	55	863	2,332	0	6,789
<b>Total</b>	<b>576,363</b>	<b>498,618</b>	<b>515,379</b>	<b>429,669</b>	<b>404,045</b>	<b>410,719</b>	<b>383,192</b>	<b>412,864</b>	<b>422,510</b>	<b>4,053,360</b>
<b>ACTUAL FUEL CENTS/LITRE</b>										
Haines Junction (Standby)	1.0902	0.0000	1.0902	0.0000	1.0902	1.0902	1.0902	0.0000	0.0000	
Watson Lake	0.8882	0.8877	0.9527	0.9840	0.9499	0.9418	0.9390	0.9342	0.9457	
Beaver Creek	1.0277	1.0316	1.0634	1.1211	1.1021	1.0923	1.0720	1.0693	1.0863	
Destruction Bay	1.0183	1.0280	1.0843	1.1036	1.0986	1.0899	1.0755	1.0501	1.0701	
Old Crow	1.7916	1.7916	1.7213	1.7255	1.7252	2.0123	1.9309	1.9391	2.0216	
Stewart Crossing (Standby)	0.0000	0.0000	0.0000	0.0000	0.7192	0.0000	0.0000	0.7192	0.7192	
Pelly Crossing	0.7557	0.0000	0.0000	0.0000	0.8051	0.8761	0.9050	0.9074	0.0000	
Swift River	0.9224	0.9364	0.9307	1.0038	1.0042	1.0075	0.9740	0.9704	0.9574	
Other (Standby)	0.8075	0.7444	0.7621	0.0000	1.5778	0.6856	0.6856	0.7792	0.6856	
<b>GRA FORECAST FUEL CENTS/LITRE</b>										
Haines Junction (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	
Watson Lake	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	
Beaver Creek	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	
Destruction Bay	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	
Old Crow	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	
Stewart Crossing (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	
Pelly Crossing	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	
Swift River	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	
Other (Standby)										
<b>FORECAST FUEL (Note 1) * (PRICE: GRA - ACTUAL)</b>										
Haines Junction (Standby)	(270)	-	-	-	-	-	-	283	-	13
Watson Lake	(5,091)	(4,511)	(27,949)	(30,991)	(20,539)	(18,038)	(16,391)	(15,973)	(20,212)	(159,694)
Beaver Creek	(11,777)	(13,129)	(10,005)	(13,410)	(12,325)	(15,101)	(12,121)	(13,905)	(13,254)	(115,027)
Destruction Bay	(11,148)	(7,002)	(11,563)	(12,062)	(10,581)	(9,637)	(8,683)	(8,315)	(9,301)	(88,294)
Old Crow	9,304	6,082	12,503	9,993	8,497	(3,239)	117	(194)	(3,685)	39,378
Stewart Crossing (Standby)	-	-	-	-	-	-	-	(14)	-	(14)
Pelly Crossing	70	63	-	13	-	1	(0)	(17)	-	129
Swift River	23	(129)	(74)	(761)	(594)	(666)	(390)	(370)	(254)	(3,213)
Other (Standby)	(2,232)	(231)	(54)	-	(102)	(38)	(592)	(1,817)	-	(5,065)
<b>Total</b>	<b>(21,121)</b>	<b>(18,857)</b>	<b>(37,141)</b>	<b>(47,218)</b>	<b>(35,644)</b>	<b>(46,717)</b>	<b>(38,061)</b>	<b>(40,321)</b>	<b>(46,706)</b>	<b>(331,786)</b>

**Yukon Electrical Company Limited**  
**Actual Diesel Fuel Consumption Comparison**  
**GRA-forecast price versus Actual fuel price**  
**2008**

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08	Total 2008
<b><u>ACTUAL LITRES FUEL</u></b>													
Haines Junction (Standby)	0	206	763	0	0	460	0	203	11,815	1,278	1,697	0	16,422
Watson Lake	358,921	390,478	323,579	282,161	265,237	264,528	251,802	264,609	281,901	294,785	325,719	422,702	3,726,422
Beaver Creek	37,783	49,071	40,278	40,937	38,047	48,206	46,192	49,088	37,478	36,250	44,513	44,869	512,712
Destruction Bay	38,029	54,948	44,928	48,891	40,098	37,654	40,409	37,046	40,060	54,236	35,440	49,545	521,284
Old Crow	40,000	43,253	52,541	43,282	37,852	37,072	38,487	36,912	40,700	44,713	47,851	60,524	523,187
Stewart Crossing (Standby)	0	1,454	0	479	0	0	0	0	0	1,384	0	0	3,317
Pelly Crossing (Note 1)	60,000	44,068	114,701	54,661	61,783	41,655	40,866	30,571	59,048	70,318	63,098	3,037	643,806
Swift River	10,547	8,736	7,507	8,791	6,323	4,519	7,658	7,944	5,055	6,814	8,708	9,107	91,709
Other (Standby - Note 2)	0	2,569	856	0	8,649	0	3,399	0	3,156	4,644	651	22,824	46,748
<b>Total</b>	<b>545,280</b>	<b>594,783</b>	<b>585,153</b>	<b>479,202</b>	<b>457,989</b>	<b>434,094</b>	<b>428,813</b>	<b>426,373</b>	<b>479,213</b>	<b>514,422</b>	<b>527,677</b>	<b>612,608</b>	<b>6,085,607</b>
<b><u>ACTUAL FUEL CENTS/LITRE</u></b>													
Haines Junction (Standby)	0.0000	0.8727	0.8727	0.0000	0.0000	0.8727	0.0000	0.8727	0.4214	1.2074	1.2074	0.0000	
Watson Lake	0.8698	0.8734	0.9814	1.0420	1.1030	1.1569	1.1831	1.1162	1.0823	1.0409	0.9222	0.7509	
Beaver Creek	0.8685	0.8415	0.8960	0.9694	1.0030	1.0894	1.1371	1.1241	1.1027	1.0877	1.0592	0.9190	
Destruction Bay	0.8899	0.8583	0.9194	0.9940	1.0273	1.1141	1.1621	1.1619	1.1185	1.0943	1.0585	0.8958	
Old Crow	1.8329	1.8329	1.8329	2.0586	2.0116	2.1469	2.1464	2.1494	2.1324	2.1325	2.1198	1.8169	
Stewart Crossing (Standby)	0.0000	0.7192	0.0000	0.7190	0.0000	0.0000	0.0000	0.0000	0.0000	0.7192	0.0000	0.0000	
Pelly Crossing	0.9314	0.9142	0.9766	1.0062	1.1045	1.2176	1.1940	1.1694	1.1272	1.1384	1.0776	1.0108	
Swift River	0.9355	0.9274	0.9275	1.0894	1.0656	1.1754	1.2597	1.2182	1.1327	1.1219	1.1295	0.9433	
Other (Standby)	0.0000	0.3301	0.7639	0.0000	0.7267	0.0000	0.6793	0.0000	0.3301	0.6577	0.7682	0.6385	
<b><u>GRA FORECAST FUEL CENTS/LITRE</u></b>													
Haines Junction (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	
Watson Lake	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	
Beaver Creek	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	
Destruction Bay	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	
Old Crow	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	
Stewart Crossing (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	
Pelly Crossing	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	
Swift River	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	
Other (Standby )	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	
<b><u>ACTUAL FUEL * (PRICE: GRA - ACTUAL)</u></b>													
Haines Junction (Standby)	-	(36)	(132)	-	-	(79)	-	(35)	3,292	(648)	(861)	-	1,501
Watson Lake	1,810	533	(34,484)	(47,189)	(60,537)	(74,635)	(77,638)	(63,873)	(58,498)	(48,968)	(15,430)	52,367	(426,541)
Beaver Creek	(2,013)	(1,292)	(3,256)	(6,314)	(7,146)	(13,220)	(14,868)	(15,165)	(10,776)	(9,879)	(10,863)	(4,656)	(99,447)
Destruction Bay	(2,230)	(1,483)	(3,960)	(7,957)	(7,857)	(10,648)	(13,368)	(12,246)	(11,505)	(14,264)	(8,052)	(3,194)	(96,763)
Old Crow	4,046	4,375	5,315	(5,390)	(2,934)	(7,889)	(8,171)	(7,946)	(8,071)	(8,873)	(8,886)	7,091	(37,332)
Stewart Crossing (Standby)	-	(28)	-	(9)	-	-	-	-	-	(27)	-	-	(64)
Pelly Crossing	(2,288)	(923)	(9,550)	(6,170)	(13,049)	(13,511)	(12,289)	(8,442)	(13,811)	(17,238)	(11,630)	(357)	(109,257)
Swift River	(117)	(26)	(23)	(1,450)	(893)	(1,134)	(2,568)	(2,334)	(1,053)	(1,346)	(1,786)	(172)	(12,903)
Other (Standby)	-	950	(55)	-	(231)	-	70	-	1,167	197	(44)	1,405	3,460
<b>Total</b>	<b>(791)</b>	<b>2,072</b>	<b>(46,145)</b>	<b>(74,479)</b>	<b>(92,647)</b>	<b>(121,116)</b>	<b>(128,830)</b>	<b>(110,040)</b>	<b>(99,254)</b>	<b>(101,046)</b>	<b>(57,552)</b>	<b>52,483</b>	<b>(777,346)</b>

**Notes:**

- (1) Pelly Crossing reverted to Standby after cutover to the Grid in December 2008.
- (2) Other Standby include: Ross River, Teslin, & Carmacks

**Yukon Electrical Company Limited**  
**Actual Diesel Fuel Consumption Comparison**  
**GRA-forecast price versus Actual fuel price**  
**2009**

	Jan 09	Feb 09	Mar 09	Apr 09	May 09	Jun 09	Jul 09	Aug 09	Sep 09	Oct 09	Nov 09	Dec 09	Total 2009
<b><u>ACTUAL LITRES FUEL</u></b>													
Haines Junction (Standby)	1,894	0	0	0	0	0	0	1,106	0	211	570	2,779	6,560
Watson Lake	367,943	337,155	347,209	274,467	264,422	260,626	247,098	260,075	275,621	344,468	316,115	400,336	3,695,535
Beaver Creek	48,048	52,620	34,949	38,018	37,250	47,253	40,929	47,450	42,396	40,280	35,576	50,057	514,826
Destruction Bay	56,424	33,708	43,274	41,934	37,475	35,275	33,667	35,972	36,865	37,044	44,242	47,303	483,183
Old Crow	62,034	40,549	55,840	45,516	38,650	39,361	34,458	36,699	40,000	51,635	37,014	59,240	540,996
Stewart Crossing (Standby)	0	0	0	0	0	0	0	20	0	0	0	0	20
Pelly Crossing	4,640	640	0	128	0	662	230	10,881	0	9,814	234	446	27,675
Swift River	9,472	8,665	9,357	7,707	5,985	6,448	6,324	6,475	6,180	6,655	7,580	6,712	87,560
Other (Standby)	15,333	1,723	393	1,830	358	304	4,789	12,935	0	10,248	4,085	467	52,465
<b>Total</b>	<b>565,788</b>	<b>475,060</b>	<b>491,022</b>	<b>409,600</b>	<b>384,140</b>	<b>389,929</b>	<b>367,495</b>	<b>411,613</b>	<b>401,062</b>	<b>500,355</b>	<b>445,416</b>	<b>567,340</b>	<b>5,408,820</b>
<b><u>ACTUAL FUEL CENTS/LITRE</u></b>													
Haines Junction (Standby)	1.2074	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.2074	0.0000	1.2074	1.2074	1.2074	
Watson Lake	0.7200	0.6504	0.6042	0.6080	0.6053	0.6563	0.6635	0.6909	0.6807	0.7098	0.7376	0.7346	
Beaver Creek	0.8666	0.8720	0.7802	0.7728	0.7381	0.7646	0.7923	0.8239	0.8322	0.8287	0.8865	0.8808	
Destruction Bay	0.8456	0.8664	0.7781	0.7531	0.7143	0.7655	0.7759	0.7987	0.8238	0.8088	0.8764	0.8722	
Old Crow	1.8259	1.8259	1.5008	1.5478	1.5424	1.4952	1.6392	1.6392	1.6190	1.6403	1.6403	1.7078	
Stewart Crossing (Standby)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.7190	0.0000	0.0000	0.0000	0.0000	
Pelly Crossing	1.0180	1.1032	0.0000	1.0498	0.0000	1.0490	0.9918	0.8830	0.0000	0.8718	0.8718	0.8719	
Swift River	0.8524	0.8524	0.7314	0.7253	0.6637	0.6676	0.6682	0.6868	0.6868	0.7267	0.7267	0.7757	
Other (Standby)	0.8233	0.7923	0.6740	0.7267	0.6856	0.7923	0.7804	0.7794	0.0000	0.7916	0.8066	0.7767	
<b><u>GRA FORECAST FUEL CENTS/LITRE</u></b>													
Haines Junction (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	
Watson Lake	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	
Beaver Creek	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	
Destruction Bay	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	
Old Crow	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	
Stewart Crossing (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	
Pelly Crossing	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	
Swift River	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	
Other (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	
<b><u>ACTUAL FUEL * (PRICE: GRA - ACTUAL)</u></b>													
Haines Junction (Standby)	(961)	-	-	-	-	-	-	(561)	-	(107)	(289)	(1,410)	(3,329)
Watson Lake	56,974	75,648	93,971	73,237	71,251	56,957	52,217	47,822	53,504	56,828	43,357	56,132	737,899
Beaver Creek	(2,471)	(2,988)	1,224	1,611	2,873	2,393	939	(413)	(720)	(543)	(2,537)	(3,286)	(3,919)
Destruction Bay	(807)	(1,183)	2,301	3,279	4,384	2,320	1,865	1,172	277	835	(1,996)	(1,935)	10,511
Old Crow	6,715	4,389	24,195	17,582	15,140	17,274	10,161	10,822	12,604	15,171	10,875	13,406	158,333
Stewart Crossing (Standby)	-	-	-	-	-	-	-	(0)	-	-	-	-	(0)
Pelly Crossing	(579)	(134)	-	(20)	-	(103)	(23)	112	-	211	5	10	(521)
Swift River	682	624	1,806	1,534	1,560	1,656	1,620	1,539	1,468	1,316	1,498	998	16,303
Other (Standby)	(1,891)	(159)	10	(49)	5	(28)	(385)	(1,027)	-	(939)	(436)	(36)	(4,935)
<b>Total</b>	<b>57,661</b>	<b>76,196</b>	<b>123,508</b>	<b>97,175</b>	<b>95,213</b>	<b>80,469</b>	<b>66,394</b>	<b>59,465</b>	<b>67,133</b>	<b>72,771</b>	<b>50,478</b>	<b>63,879</b>	<b>910,343</b>

**Yukon Electrical Company Limited**  
**Actual Diesel Fuel Consumption Comparison**  
**GRA-forecast price versus Actual fuel price**  
**2010**

	Jan 10	Feb 10	Mar 10	Apr 10	May 10	Jun 10	Jul 10	Aug 10	Sep 10	Oct 10	Nov 10	Dec 10	Total 2010
<b>ACTUAL LITRES FUEL</b>													
Haines Junction (Standby)	210	0	0	0	0	0	0	408	0	615	9,880	0	11,113
Watson Lake	375,227	366,140	312,889	314,960	273,305	208,200	243,871	262,632	263,576	291,249	367,680	393,383	3,673,112
Beaver Creek	49,105	48,427	38,837	37,691	38,802	49,414	47,043	51,010	42,632	38,428	45,983	39,128	526,500
Destruction Bay	51,091	46,738	41,058	40,417	36,984	35,756	33,697	37,843	37,912	39,930	46,407	49,915	497,748
Old Crow	51,480	53,682	41,845	41,269	35,885	29,878	39,855	37,928	38,808	47,806	47,435	48,297	514,168
Stewart Crossing (Standby)	96	837	0	0	0	103	0	0	0	0	0	0	1,036
Pelly Crossing	0	0	135	0	0	0	0	-255	0	7,089	0	0	6,969
Swift River	7,939	6,173	6,413	5,612	6,082	5,204	3,892	5,831	5,113	7,532	6,715	7,843	74,349
Other (Standby)	1,571	430	89	512	246	244	621	888	0	1,105	589	110	6,405
<b>Total</b>	<b>536,719</b>	<b>522,427</b>	<b>441,266</b>	<b>440,461</b>	<b>391,304</b>	<b>328,799</b>	<b>368,979</b>	<b>396,285</b>	<b>388,041</b>	<b>433,754</b>	<b>524,689</b>	<b>538,676</b>	<b>5,311,400</b>

<b>ACTUAL FUEL CENTS/LITRE</b>													
Haines Junction (Standby)	1.2076	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.2075	0.0000	1.2076	1.0010	0.0000	
Watson Lake	0.7522	0.7175	0.7281	0.7458	0.7253	0.7130	0.6997	0.7141	0.7391	0.7906	0.8322	0.8784	
Beaver Creek	0.8985	0.8719	0.8698	0.8615	0.8608	0.8281	0.8188	0.8369	0.8473	0.8689	0.9607	1.0180	
Destruction Bay	0.8915	0.8662	0.8707	0.8555	0.8524	0.8318	0.8251	0.8349	0.8339	0.9040	0.9468	1.0031	
Old Crow	1.7109	1.7109	1.6948	1.6972	1.6965	1.6982	1.7187	1.7187	1.7166	1.7166	1.7166	1.7916	
Stewart Crossing (Standby)	0.0000	0.7192	0.0000	0.0000	0.0000	0.7191	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Pelly Crossing	0.0000	0.0000	0.8719	0.0000	0.0000	0.0000	0.0000	0.7557	0.0000	0.7557	0.0000	0.0000	
Swift River	0.7775	0.7775	0.7911	0.7911	0.7764	0.7764	0.7774	0.7910	0.7910	0.7910	0.8706	0.9224	
Other (Standby)	0.7207	0.7505	0.7791	0.8297	0.7141	0.7626	0.8078	0.8282	0.0000	0.6856	0.7792	0.7792	

<b>GRA FORECAST FUEL CENTS/LITRE</b>													
Haines Junction (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	
Watson Lake	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	
Beaver Creek	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	
Destruction Bay	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	
Old Crow	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	
Stewart Crossing (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	
Pelly Crossing	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	
Swift River	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	
Other (Standby )	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	

<b>ACTUAL FUEL * (PRICE: GRA - ACTUAL)</b>													
Haines Junction (Standby)	(107)	-	-	-	-	-	-	(207)	-	(312)	(2,974)	-	(3,599)
Watson Lake	46,010	57,596	45,896	40,639	40,858	33,677	42,701	42,193	35,771	24,524	15,679	(1,406)	424,139
Beaver Creek	(4,091)	(2,745)	(2,119)	(1,745)	(1,771)	(635)	(169)	(1,105)	(1,370)	(2,064)	(6,691)	(7,934)	(32,440)
Destruction Bay	(3,076)	(1,630)	(1,619)	(978)	(779)	(16)	210	(135)	(99)	(2,903)	(5,361)	(8,574)	(24,960)
Old Crow	11,488	11,980	10,013	9,775	8,525	7,048	8,587	8,171	8,440	10,397	10,317	6,883	111,624
Stewart Crossing (Standby)	67	(16)	-	-	-	(2)	-	-	-	-	-	-	49
Pelly Crossing	-	-	3	-	-	-	-	(35)	-	975	-	-	943
Swift River	1,166	907	855	748	900	770	572	778	682	1,005	361	16	8,760
Other (Standby)	(33)	(22)	(7)	(66)	(3)	(15)	(67)	(114)	-	16	(47)	(9)	(367)
<b>Total</b>	<b>51,425</b>	<b>66,069</b>	<b>53,021</b>	<b>48,372</b>	<b>47,730</b>	<b>40,827</b>	<b>51,833</b>	<b>49,547</b>	<b>43,425</b>	<b>31,639</b>	<b>11,285</b>	<b>(11,024)</b>	<b>484,149</b>

**Yukon Electrical Company Limited**  
**Actual Diesel Fuel Consumption Comparison**  
**GRA-forecast price versus Actual fuel price**  
**2011**

	Jan 11	Feb 11	Mar 11	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	YTD 2011
<b><u>ACTUAL LITRES FUEL</u></b>										
Haines Junction (Standby)	639	0	319	0	213	1,991	449	0	0	3,611
Watson Lake	396,165	342,778	358,910	288,421	290,780	253,321	244,218	290,371	261,516	2,726,480
Beaver Creek	56,893	47,324	42,427	40,018	43,089	47,508	52,597	50,619	44,363	424,838
Destruction Bay	57,740	50,475	45,756	42,353	35,570	42,488	29,080	37,074	38,842	379,378
Old Crow	72,271	53,088	63,231	45,891	39,945	38,866	38,409	35,466	41,305	428,472
Stewart Crossing (Standby)	0	0		0	207		0	414	294	915
Pelly Crossing	500	0	4,591	0	16,440	24,796	44,322	10,605	0	101,254
Swift River	9,434	7,917	8,874	6,630	6,262	5,013	4,823	6,090	6,458	61,501
Other (Standby)	1,494	1,081	2,103		3,980	50	177	100	402	9,387
<b>Total</b>	<b>595,136</b>	<b>502,663</b>	<b>526,211</b>	<b>423,313</b>	<b>436,486</b>	<b>414,033</b>	<b>414,075</b>	<b>430,739</b>	<b>393,180</b>	<b>4,135,836</b>

**ACTUAL FUEL CENTS/LITRE**

Haines Junction (Standby)	1.0902	0.0000	1.0902	0.0000	1.0902	1.0902	1.0902	0.0000	0.0000
Watson Lake	0.8882	0.8877	0.9527	0.9840	0.9499	0.9418	0.9390	0.9342	0.9457
Beaver Creek	1.0277	1.0316	1.0634	1.1211	1.1021	1.0923	1.0720	1.0693	1.0863
Destruction Bay	1.0183	1.0280	1.0843	1.1036	1.0986	1.0899	1.0755	1.0501	1.0701
Old Crow	1.7916	1.7916	1.7213	1.7255	1.7252	2.0123	1.9309	1.9391	2.0216
Stewart Crossing (Standby)	0.0000	0.0000	0.0000	0.0000	0.7192	0.0000	0.0000	0.7192	0.7192
Pelly Crossing	0.7557	0.0000	0.0000	0.0000	0.8051	0.8761	0.9050	0.9074	0.0000
Swift River	0.9224	0.9364	0.9307	1.0038	1.0042	1.0075	0.9740	0.9704	0.9574
Other (Standby)	0.8075	0.7444	0.7621	0.0000	1.5778	0.6856	0.6856	0.7792	0.6856

**GRA FORECAST FUEL CENTS/LITRE**

Haines Junction (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000
Watson Lake	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748
Beaver Creek	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152
Destruction Bay	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313
Old Crow	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341
Stewart Crossing (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000
Pelly Crossing	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933
Swift River	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244
Other (Standby )	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000

**ACTUAL FUEL \* (PRICE: GRA - ACTUAL)**

Haines Junction (Standby)	(249)	-	(124)	-	(83)	(777)	(175)	-	-	(1,409)
Watson Lake	(5,303)	(4,437)	(27,949)	(31,506)	(21,850)	(16,961)	(15,672)	(17,252)	(18,553)	(159,485)
Beaver Creek	(12,092)	(10,239)	(10,532)	(12,240)	(12,363)	(13,165)	(13,507)	(12,863)	(12,027)	(109,028)
Destruction Bay	(10,800)	(9,926)	(11,574)	(11,533)	(9,508)	(10,989)	(7,100)	(8,113)	(9,277)	(88,820)
Old Crow	10,300	7,566	13,453	9,574	8,345	(3,039)	124	(178)	(3,616)	42,529
Stewart Crossing (Standby)	-	-	-	-	(4)	-	-	(8)	(6)	(18)
Pelly Crossing	69	-	4,101	-	1,450	427	(517)	(150)	-	5,381
Swift River	19	(95)	(56)	(526)	(500)	(417)	(239)	(280)	(213)	(2,307)
Other (Standby)	(161)	(48)	(130)	-	(3,494)	1	3	(8)	6	(3,832)
<b>Total</b>	<b>(18,218)</b>	<b>(17,178)</b>	<b>(32,812)</b>	<b>(46,232)</b>	<b>(38,007)</b>	<b>(44,921)</b>	<b>(37,085)</b>	<b>(38,852)</b>	<b>(43,685)</b>	<b>(316,989)</b>

**Notes:**

- (1) Pelly Crossing reverted to Standby after cutover to the Grid in December 2008.
- (2) Other Standby include: Ross River, Teslin, & Carmacks

Yukon Energy and Yukon Electrical  
Rider F – Fuel Adjustment Rider &  
Deferred Fuel Price Variance Policy  
YUB-YEC/YECL-2-1(f) Attachment 2

YEC's 2009 GRA Diesel Fuel Consumption

Month	2008			2009		
	GRA (litres) <sup>1</sup>	at GRA Approved Prices (\$)	at Actual Prices (\$)	GRA (litres)	at GRA Approved Prices (\$)	at Actual Prices (\$)
January	11,251	10,831	8,340	38,035	37,563	34,177
February	25,442	24,521	20,048	44,253	43,746	38,012
March	-	-	-	44,252	43,745	38,010
April	32,316	31,508	30,716	8,474	8,262	7,631
May	51,855	49,890	43,910	7,729	7,536	6,926
June	10,588	10,323	10,064	8,758	8,539	7,926
July	9,355	9,121	8,892	9,607	9,367	8,651
August	8,852	8,631	8,414	9,021	8,795	8,123
September	9,652	9,411	9,174	9,732	9,489	8,754
October	7,406	7,221	7,040	7,949	7,750	6,953
November	36,200	35,774	32,162	36,183	35,757	29,506
December	37,135	36,685	33,992	37,317	36,863	30,497
<b>Annual Total</b>	<b>240,053</b>	<b>233,916</b>	<b>212,752</b>	<b>261,311</b>	<b>257,412</b>	<b>225,167</b>

Less: RFID	48,140	46,214		
Add: Line Maintenance	92,864	92,121		
Add: Mechanical Main.	100,725	96,696		
<b>Total GRA</b>	<b>385,503</b>	<b>376,520</b>	Note 2	<b>450,979</b> <b>442,339</b> Note 3

Notes:

1. Based on 2009 GRA Diesel Efficiency.
2. Compliance Filing per Board Order 2009-8, Appendix 3.1, Schedule 12, Line 12.
3. Compliance Filing per Board Order 2009-8, Appendix 3.2, Schedule 12, Line 12.

Actual Diesel Fuel Consumption (litres)

Month	2008			2009			2010			2011 (ytd)		
	Actual (litres)	at GRA Approved Prices (\$)	at Actual Prices (\$)	Actual (litres)	at GRA Approved Prices (\$)	at Actual Prices (\$)	Actual (litres)	at GRA Approved Prices (\$)	at Actual Prices (\$)	Actual (litres)	at GRA Approved Prices (\$)	at Actual Prices (\$)
January	11,684	11,276	8,915	208,156	200,413	171,877	45,607	43,923	38,224	603,369	585,255	563,873
February	26,402	25,418	20,789	33,849	32,659	28,461	15,221	14,707	12,600	348,553	338,036	335,131
March	477	466	363	2,192	2,134	2,001	4,373	4,322	3,569	843,969	816,726	867,587
April	29,909	29,133	28,154	11,954	11,774	9,633	44,212	43,035	39,922	449,810	437,891	482,113
May	51,150	49,219	43,422	41,355	40,008	32,268	9,465	8,677	7,564	211,552	205,543	228,749
June	11,267	10,979	10,674	3,266	3,226	2,671	10,334	10,080	8,612	283,791	275,846	282,374
July	629	618	590	77,032	74,168	60,998	79,563	76,690	65,664	143,558	138,950	139,506
August	2,094	2,060	1,870	58,751	58,193	47,009	193,390	187,698	169,443	142,474	137,554	140,918
September	7,373	7,177	6,927	100,675	97,845	88,012	35,294	34,240	30,198	139,617	135,996	146,145
October	88,698	85,963	85,066	40,000	39,349	29,097	75,453	73,584	63,628	-	-	-
November	12,772	12,536	12,320	20,503	19,818	16,290	149,100	145,365	136,288	-	-	-
December	212,183	204,233	208,321	118,344	113,632	87,603	767,592	742,637	703,186	-	-	-
<b>Annual Total</b>	<b>454,638</b>	<b>439,078</b>	<b>427,412</b>	<b>716,077</b>	<b>693,219</b>	<b>575,921</b>	<b>1,429,604</b>	<b>1,384,958</b>	<b>1,278,899</b>	<b>3,166,693</b>	<b>3,071,797</b>	<b>3,186,396</b>

	Diesel - Litres					Diesel - Cost - Actual					Diesel - Cost - 2009 GRA Price							
	Whitehorse	Faro	Dawson	Mayo	Total	Whitehorse	Faro	Dawson	Mayo	Total	Whitehorse	Faro	Dawson	Mayo	Total			
						\$	\$	\$	\$	\$	\$	\$	\$	\$	\$			
<b>2008 - GRA Test year</b>																		
January	9,792	473	986		11,251	7,127	362	852	-	8,340	9,400	469	961	-	10,831			
February	20,044	887	4,511		25,442	15,371	678	3,999	-	20,048	19,242	880	4,398	-	24,521			
March	-	-	-		-	-	-	-	-	-	-	-	-	-	-			
April	-	-	32,316		32,316	-	-	30,716	-	30,716	-	-	31,508	-	31,508			
May	48,140	3,135	581		51,855	40,716	2,642	552	-	43,910	46,214	3,110	566	-	49,890			
June	-	-	10,588		10,588	-	-	10,064	-	10,064	-	-	10,323	-	10,323			
July	-	-	9,355		9,355	-	-	8,892	-	8,892	-	-	9,121	-	9,121			
August	-	-	8,852		8,852	-	-	8,414	-	8,414	-	-	8,631	-	8,631			
September	-	-	9,652		9,652	-	-	9,174	-	9,174	-	-	9,411	-	9,411			
October	-	-	7,406		7,406	-	-	7,040	-	7,040	-	-	7,221	-	7,221			
November	-	28,169	8,031		36,200	-	23,735	8,427	-	32,162	-	27,944	7,831	-	35,774			
December	-	28,169	8,966		37,135	-	24,585	9,408	-	33,992	-	27,944	8,742	-	36,685			
<b>Annual Total</b>	<b>77,976</b>	<b>60,834</b>	<b>101,244</b>	<b>-</b>	<b>240,053</b>	<b>63,214</b>	<b>52,001</b>	<b>97,537</b>	<b>-</b>	<b>212,752</b>	<b>74,857</b>	<b>60,347</b>	<b>98,713</b>	<b>-</b>	<b>233,916</b>			
<b>2008 - Actual</b>																		
January	9,233	965	2,219	-	733	11,684	6,720	738	1,916	-	459	8,915	8,864	957	2,164	-	709	11,276
February	21,727	138	4,537	-		26,402	16,661	106	4,023	-		20,789	20,858	137	4,424	-		25,418
March	132	210	65	70	477		101	161	58	44	363		127	208	63	68		466
April	2,046	-	28,175	-	312	29,909	1,569	-	26,781	-	195	28,154	1,964	-	27,471	-	302	29,133
May	46,710	2,826	1,614	-		51,150	39,507	2,381	1,534	-		43,422	44,842	2,803	1,574	-		49,219
June	358	3	10,801	105		11,267	339	3	10,266	66		10,674	344	3	10,531	102		10,979
July	349	-	950	28	629		331	-	903	18	590		335	-	926	27		618
August	67	1,127	900	-		2,094	65	950	855	-	1,870		64	1,118	878	-		2,060
September	677	-	6,450	246		7,373	642	-	6,131	154	6,927		650	-	6,289	238		7,177
October	47,767	11,933	28,450	548		88,698	47,627	10,054	27,042	343	85,066		45,856	11,838	27,739	530		85,963
November	1,371	5,901	6,002	-	502	12,772	1,367	4,972	6,298	-	317	12,320	1,316	5,854	5,852	-	485	12,536
December	179,554	2,911	29,540	178		212,183	174,674	2,541	30,995	111	208,321		172,372	2,888	28,802	172		204,233
<b>Annual Total</b>	<b>309,293</b>	<b>26,014</b>	<b>119,703</b>	<b>-</b>	<b>372</b>	<b>454,638</b>	<b>288,942</b>	<b>21,904</b>	<b>116,802</b>	<b>-</b>	<b>236</b>	<b>427,412</b>	<b>296,921</b>	<b>25,806</b>	<b>116,710</b>	<b>-</b>	<b>360</b>	<b>439,078</b>
			DFPV				8,650	4,135	(97)	82	12,770							
			GRA Cost = (Actual cost + DFPV)				<b>297,592</b>	<b>26,039</b>	<b>116,705</b>	<b>(154)</b>	<b>440,182</b>							
			Cost/L with DFPV				0.9622	1.0010	0.9750	0.4141								
			GRA Approved Cost				0.9607	0.9927	0.9757									
			Difference - \$/litre				0.0015	0.0083	(0.0007)									

Yukon Energy and Yukon Electrical  
Rider F – Fuel Adjustment Rider &  
Deferred Fuel Price Variance Policy  
YUB-YEC/YECL-2-1(f) Attachment 2

	Diesel - Litres					Diesel - Cost - Actual					Diesel - Cost - 2009 GRA Price				
	Whitehorse	Faro	Dawson	Mayo	Total	Whitehorse	Faro	Dawson	Mayo	Total	Whitehorse	Faro	Dawson	Mayo	Total
						\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>2009 - GRA Test year</b>	<b>\$</b>														
January	-	28,169	9,866	-	38,035	-	24,585	9,592	-	34,177	-	27,944	9,619	-	37,563
February	-	35,211	9,042	-	44,253	-	29,221	8,791	-	38,012	-	34,930	8,816	-	43,746
March	-	35,211	9,041	-	44,252	-	29,221	8,790	-	38,010	-	34,930	8,815	-	43,745
April	-	-	8,474	-	8,474	-	-	7,631	-	7,631	-	-	8,262	-	8,262
May	-	-	7,729	-	7,729	-	-	6,926	-	6,926	-	-	7,536	-	7,536
June	-	-	8,758	-	8,758	-	-	7,926	-	7,926	-	-	8,539	-	8,539
July	-	-	9,607	-	9,607	-	-	8,651	-	8,651	-	-	9,367	-	9,367
August	-	-	9,021	-	9,021	-	-	8,123	-	8,123	-	-	8,795	-	8,795
September	-	-	9,732	-	9,732	-	-	8,754	-	8,754	-	-	9,489	-	9,489
October	-	-	7,949	-	7,949	-	-	6,953	-	6,953	-	-	7,750	-	7,750
November	-	28,169	8,014	-	36,183	-	22,495	7,010	-	29,506	-	27,944	7,814	-	35,757
December	-	28,169	9,148	-	37,317	-	22,495	8,002	-	30,497	-	27,944	8,919	-	36,863
<b>Annual Total</b>	-	<b>154,930</b>	<b>106,381</b>	-	<b>261,311</b>	-	<b>128,017</b>	<b>97,150</b>	-	<b>225,167</b>	-	<b>153,690</b>	<b>103,721</b>	-	<b>257,412</b>

<b>2009 - Actual</b>															
January	178,858	8,431	20,867	0	208,156	144,232	7,358	20,287	-	171,877	171,704	8,364	20,345	0	200,413
February	24,284	1,303	8,100	162	33,849	19,403	1,081	7,875	102	28,461	23,313	1,293	7,898	157	32,659
March	452	218	1,471	51	2,192	359	181	1,430	32	2,001	434	216	1,434	49	2,134
April	3,312	9,940	1,298	0	11,954	2,553	8,249	1,169	-	9,633	3,180	9,860	1,266	0	11,774
May	31,656	9,494	205	0	41,355	24,206	7,879	184	-	32,268	30,390	9,418	200	0	40,008
June	0	2,504	625	137	3,266	-	2,020	566	86	2,671	0	2,484	609	132	3,226
July	66,690	3,667	6,675	0	77,032	52,030	2,958	6,011	-	60,998	64,022	3,638	6,508	0	74,168
August	1,475	54,886	2,390	0	58,751	1,135	43,722	2,152	-	47,009	1,416	54,447	2,330	0	58,193
September	21,183	393	78,793	306	100,675	16,636	313	70,872	190	88,012	20,336	390	76,823	296	97,845
October	480	21,047	18,332	141	40,000	377	12,596	16,036	88	29,097	461	20,879	17,874	136	39,349
November	15,920	3,933	650	0	20,503	12,580	3,141	569	-	16,290	15,283	3,902	634	0	19,818
December	117,150	204	990	0	118,344	86,574	163	866	-	87,603	112,464	202	965	0	113,632
<b>Annual Total</b>	<b>461,460</b>	<b>116,020</b>	<b>137,800</b>	<b>797</b>	<b>716,077</b>	<b>360,085</b>	<b>89,660</b>	<b>125,679</b>	<b>498</b>	<b>575,921</b>	<b>443,002</b>	<b>115,092</b>	<b>134,355</b>	<b>771</b>	<b>693,219</b>

DFPV	87,329	26,489	9,128	109	123,054
GRA Cost = (Actual cost + DFPV)	<b>447,414</b>	<b>116,149</b>	<b>134,806</b>	<b>607</b>	<b>698,975</b>
Cost/L with DFPV	0.9696	1.0011	0.9783	0.7612	
GRA Approved Cost	0.9607	0.9927	0.9757		
Difference - \$/litre	0.0089	0.0084	0.0026		

Yukon Energy and Yukon Electrical  
Rider F – Fuel Adjustment Rider &  
Deferred Fuel Price Variance Policy  
YUB-YEC/YECL-2-1(f) Attachment 2

	Diesel - Litres					Diesel - Cost - Actual					Diesel - Cost - 2009 GRA Price				
	Whitehorse	Faro	Dawson	Mayo	Total	Whitehorse	Faro	Dawson	Mayo	Total	Whitehorse	Faro	Dawson	Mayo	Total
						\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>2010 - Actual</b>															
January	37,186	877	7,471	73	45,607	30,918	700	6,561	45	38,224	35,699	870	7,284	71	43,923
February	11,281	2,229	1,469	242	15,221	9,379	1,780	1,290	151	12,600	10,830	2,211	1,432	234	14,707
March	-	3,403	970	-	4,373	-	2,718	852	-	3,569	-	3,376	946	-	4,322
April	-	4,220	48,432	-	44,212	-	3,381	43,303	-	39,922	-	4,186	47,221	-	43,035
May	7,077	868	1,520	-	9,465	5,485	720	1,359	-	7,564	6,334	861	1,482	-	8,677
June	4,548	4,286	1,500	-	10,334	3,781	3,474	1,358	-	8,612	4,366	4,252	1,463	-	10,080
July	66,162	7,972	2,000	3,429	79,563	55,268	6,462	1,801	2,134	65,664	63,516	7,908	1,950	3,316	76,690
August	61,618	4,503	126,131	1,138	193,390	51,471	3,683	113,581	708	169,443	59,153	4,467	122,978	1,100	187,698
September	10,231	-	22,743	2,320	35,294	8,546	-	20,208	1,444	30,198	9,822	-	22,174	2,243	34,240
October	38,548	35,225	1,267	413	75,453	32,200	29,984	1,126	318	63,628	37,006	34,943	1,235	399	73,584
November	11,072	9,310	128,709	9	149,100	9,676	7,985	118,620	7	136,288	10,629	9,236	125,491	9	145,365
December	413,353	26,411	326,104	1,724	767,592	369,248	22,972	309,649	1,317	703,186	396,819	26,200	317,951	1,667	742,637
<b>Annual Total</b>	<b>661,076</b>	<b>90,864</b>	<b>668,316</b>	<b>9,348</b>	<b>1,429,604</b>	<b>575,973</b>	<b>77,096</b>	<b>619,707</b>	<b>6,123</b>	<b>1,278,899</b>	<b>634,173</b>	<b>90,137</b>	<b>651,608</b>	<b>9,040</b>	<b>1,384,958</b>
			DFPV			63,763	11,406	33,151	3,028	111,348					
			GRA Cost = (Actual cost + DFPV)			<b>639,736</b>	<b>88,502</b>	<b>652,858</b>	<b>9,152</b>	<b>1,390,247</b>					
			Cost/L with DFPV			0.9677	0.9740	0.9769	0.9790						
			GRA Approved Cost			0.9607	0.9927	0.9757							
			Difference - \$/litre			0.0070	(0.0187)	0.0012							

YUKON TERRITORY

C A N A D A

Whitehorse, Yukon

ORDER-IN-COUNCIL 1988/150

PUBLIC UTILITIES ACT

Pursuant to section 17 of the Public Utilities Act, the Commissioner in Executive Council orders:

1. The annexed Rate Policy Directive is hereby made and established.

Dated at Whitehorse, in the Yukon Territory, this 12 day of September, A.D., 1988.

Filed: 98 09 12

I hereby certify that the foregoing is a true copy of the original instrument of which it purports to be a copy.

[Signature]  
Registrar of Regulations

[Signature]  
Commissioner of the Yukon

PUBLIC UTILITIES ACT

RATE POLICY DIRECTIVE

1. The Board shall regulate rates of Yukon Energy Corporation subject to the terms and conditions of the Purchase and Sale Agreement between Yukon Energy Corporation, Canada, Yukon and Northern Canada Power Commission, dated March 31, 1987, including the valuation therein of assets acquired by Yukon Energy Corporation, the constraints therein on Yukon Energy Corporation rates up to March 31, 1989, and the terms and conditions of any contracts entered into by Yukon Energy Corporation as contemplated by the Agreement of Purchase and Sale or therein assigned to Yukon Energy Corporation.
2. The Board shall deem the equity of Yukon Energy Corporation as at March 31, 1987, to be the sum of \$39,000,000.00, and shall include in the rates of Yukon Energy Corporation provision to recover a normal commercial return on Yukon Energy Corporation's equity as such equity may vary from time to time.
3. The Board shall regulate retail power rates of Yukon Energy Corporation and The Yukon Electrical Company Limited with respect to residential, general service and street lighting power customers in accordance with the following power rate policy for Yukon, effective for rates after April 1, 1989:
  - (a) one rate zone shall apply for all Yukon power customers other than government accounts;
  - (b) retail rates for non-government accounts of Yukon Energy Corporation shall equal the same rates approved for The Yukon Electrical Company Limited, such rates to be determined based on The Yukon Electrical Company Limited's costs of service;

- (c) excluding government accounts, The Yukon Electrical Company Limited rates within each customer class shall be the same throughout Yukon, subject only to provision of separate energy run-off rates reflecting short term incremental energy costs in communities supplied primarily by generation other than hydro, such run-off rates to be applicable only to levels of use in excess of 1,000 kWh per month for residential customers and 2,000 kWh per month for general service customers;
- (d) the Board shall not authorize any increase in average retail rates charged to residential customers by The Yukon Electrical Company Limited in excess of the increase in the average retail rate charged by The Yukon Electrical Company Limited to all of its customers;
- (e) the Board shall permit Yukon Energy Corporation and The Yukon Electrical Company Limited to adjust their rates so as to reflect fluctuations in the prices for which they contract for the supply of diesel fuel from time to time, without the requirement for specific application to and approval of the Board. Subject to the foregoing, the procedures respecting such rate adjustments shall be determined by the Board;
- (f) within the policy framework set out herein, retail rates other than those applicable for government accounts shall be reviewed and approved by the Board in accordance with normal regulatory principles applicable in Canada for similar power utilities, and the Board shall aim to review rates once every two years, with an initial hearing to occur during 1988 or early 1989 to approve rates applicable starting on April 1, 1989 or such earlier date as may be agreed upon between the Government of the Yukon and the Government of Canada;
- (g) Yukon Energy Corporation and The Yukon Electrical Company Limited rates applicable to government accounts shall be excluded from retail rate equalization and shall continue as at present, with adjustments in future to reflect changes in applicable costs and any increases in rates approved for all retail customers.

4. The Board shall regulate bulk power rates of Yukon Energy Corporation affecting wholesale and industrial power customers in accordance with the following power rate policy for Yukon, effective for rates after April 1, 1989:

- (a) all wholesale charges to The Yukon Electrical Company Limited shall be pooled to provide one demand rate and one energy rate applicable throughout Yukon and such rates shall be sufficient to recover Yukon Energy Corporation's regulated costs not otherwise recovered from other Yukon Energy Corporation customers;
  - (b) the wholesale rate to The Yukon Electrical Company Limited shall include appropriate provisions to ensure that Yukon Energy Corporation will recover its costs for retail power service with adoption of The Yukon Electrical Company Limited rates as specified herein;
  - (c) the rates charged to major industrial customers shall be in conformance with any contract between such industrial customers and Yukon Energy Corporation, and no increase or decrease in the existing rates charged to such industrial customers shall occur unless such modification is requested by Yukon Energy Corporation and is in conformance with such contract.
5. The Board shall treat any monies to be received by The Yukon Electrical Company Limited from the Government of the Yukon, pursuant to the Government of the Yukon's prevailing policy with respect to rebate of income tax paid by The Yukon Electrical Company Limited, as acting in corresponding reduction, in the year in which such income tax is paid, of The Yukon Electrical Company Limited's revenue requirements as determined from time to time by the Board.

YUKON TERRITORY

TERRITOIRE DU YUKON

CANADA

CANADA

Whitehorse, Yukon

Whitehorse, Yukon

ORDER-IN-COUNCIL 1991/62

DÉCRET 1991/62

PUBLIC UTILITIES ACT

LOI SUR LES SERVICES PUBLICS

Pursuant to sections 17 and 18 of the Public Utilities Act, the Commissioner in Executive Council orders as follows:

Le Commissaire en conseil exécutif, conformément aux articles 17 et 18 de la Loi sur les services publics, décrète ce qui suit:

1. Order-in-Council 1988/150 is hereby revoked.


1. Le Décret 1988/150 est par les présentes révoqué.

2. The annexed Rate Policy Directive (1991) is hereby made.

2. Les instructions sur la politique tarifaire (1991) paraissant en annexe sont par les présentes adoptées.

Dated at Whitehorse, in the Yukon Territory, this 27 day of March, 1991.

Fait à Whitehorse, dans le territoire du Yukon, ce 27 jour de mars 1991.

  
Administrator of Yukon

Administrateur du Yukon

PUBLIC UTILITIES ACT

RATE POLICY DIRECTIVE (1991)

Interpretation

1. In this Directive

"customer" refers to a purchaser of electricity; ("Client")

"government customer" means a retail customer

(a) who is a federal or territorial department or agency, a municipality, a hamlet, or the governing body of a Yukon First Nation;

(b) a body, other than one carrying on a business with a view to making a profit, that derives all or substantially all of its funding from a body referred to in paragraph (a); ("Client gouvernemental")

"isolated industrial customer" means a customer engaged in manufacturing, processing, or mining and whose electrical service is not inter-connected with electrical service provided to any other customer; ("Client industriel isolé")

"major industrial customer" means a customer engaged in manufacturing, processing, or mining, whose peak demand for electricity exceeds 1 MW, but it does not include an isolated industrial customer; ("Client industriel majeur")

"retail customer" means a customer of Yukon Energy Corporation or of The Yukon Electrical Company Limited, other than a major industrial customer, an isolated industrial customer, or a wholesale customer; ("Client au détail")

"wholesale customer" means The Yukon Electrical Company Limited when it purchases electricity from Yukon Energy Corporation; ("Client en gros")

LOI SUR LES SERVICES PUBLICS

INSTRUCTIONS SUR LA POLITIQUE  
TARIFAIRE

Définitions

1. Les définitions qui suivent s'appliquent aux présentes instructions:

"Client" Acheteur d'électricité; ("customer")

"Client au détail" Client de la Yukon Energy Corporation ou de The Yukon Electrical Company Limited qui n'est ni un client industriel majeur, ni un client industriel isolé, ni un client en gros; ("retail customer")

"Client en gros" The Yukon Electrical Company Limited lorsqu'elle achète de l'énergie de la Yukon Energy Corporation; ("wholesale customer")

"Client gouvernemental" Client au détail qui est:

(a) soit un organisme gouvernemental, un ministère fédéral ou territorial, une municipalité, un hameau ou le corps dirigeant d'une Première nation du Yukon;

(b) soit un organisme qui n'exploite aucune entreprise à des fins lucratives et dont le financement provient en totalité, ou pour l'essentiel, d'un organisme décrit à l'alinéa 1(a); ("government customer")

"Client industriel isolé" Client qui se livre à une activité de fabrication, de traitement ou à l'exploitation d'une mine et dont l'approvisionnement en électricité est indépendant de celui de tout autre client; ("isolated industrial customer")

"Client industriel majeur" Client autre qu'un client industriel isolé qui se livre à une activité de fabrication, de traitement ou à l'exploitation d'une mine et dont la demande de pointe d'électricité dépasse 1 MW; ("major industrial customer")

#### Normal return on equity

2. The Board must include in the rates of Yukon Energy Corporation provision to recover a normal commercial return on Yukon Energy Corporation's equity, less one half of one percent (.5 %).

#### Retail rate adjustments

3. The Board must ensure that rate adjustments for retail customers apply equally, when measured as percentages, to all classes of retail customers.

#### Normal principles to apply

4. Except to the extent otherwise stated by this Directive or the Act, the Board must review and approve rates in accordance with normal principles applicable in Canada for similar utilities.

#### Demand-side management

5.(1) The Board shall encourage Yukon Energy Corporation and The Yukon Electrical Company Limited to promote economy and efficiency in the generation, transmission, and use of electricity.

(2) The Board shall allow Yukon Energy Corporation and The Yukon Electrical Company Limited to recover, through rates, the expenditures reasonably incurred by them for the purposes set out in subsection (1).

#### Retail rates: non-government customers

6.(1) The Board must fix rates for retail customers, other than government customers, in accordance with the following rate policy for Yukon

(a) subject to subsection (2), the rates for non-government retail customers must be the same throughout the Yukon and must be sufficient to recover costs that are not to be recovered from government customers or from major industrial customers;

#### Rendement normal sur la valeur nette

2. La Commission prévoit dans les tarifs de la Yukon Energy Corporation les mesures pour réaliser un rendement commercial normal sur sa valeur nette, moins 5 dixièmes pour cent (.5 %).

#### Ajustements des tarifs de détail

3. La Commission s'assure que les ajustements tarifaires pour les clients au détail s'appliquent uniformément en termes de pourcentage à toutes les catégories de clients au détail.

#### Application des principes ordinaires

4. La Commission examine et approuve, sauf indication contraire dans les présentes instructions ou dans la Loi, les tarifs aux clients selon les principes ordinaires de réglementation en application au Canada pour des services publics semblables.

#### Gestion de la demande

5.(1) La Commission encourage la Yukon Energy Corporation et The Yukon Electrical Company Limited à produire, transmettre et utiliser l'électricité de façon plus efficace et plus économique.

(2) La Commission permet à la Yukon Energy Corporation et à The Yukon Electrical Company Limited de recouvrer, au moyen des tarifs, les dépenses raisonnables qu'elles encourent pour les programmes décrits au paragraphe (1).

#### Tarifs au détail pour les clients non-gouvernementaux

6.(1) La Commission fixe les tarifs pour les clients au détail non-gouvernementaux selon la politique tarifaire du Yukon suivante:

(a) les tarifs pour les clients non-gouvernementaux s'appliquent, sous réserve du paragraphe (2), uniformément à la grandeur du Yukon et doivent suffire à générer les recettes pour recouvrer les coûts qui ne sont pas recouverts des clients gouverne-

(b) subject to subsection (2), rates for each class of non-government retail customer must be the same throughout Yukon and without variation between Yukon Energy Corporation and The Yukon Electrical Company Limited customers;

(2) Separate runoff rates must be allowed for non-government retail customers to reflect short-term incremental energy costs in communities supplied primarily by generation other than hydro, but

(a) for residential non-government retail customers, the runoff rate may be applied only to consumption in excess of 1,000 kWh per month, and

(b) for general service non-government retail customers, the runoff rate may be applied only to whichever of the following the Board approves:

(i) consumption in excess of 2,000 kWh per month, or

(ii) consumption in excess of a level which would, for an average customer of that class, be equivalent to 2,000 kWh per month for general service non-government retail power customers.

#### Retail rates: government customers

7.(1) The Board must fix rates for government customers in accordance with the following power rate policy for Yukon

(a) subject to section 3, rates for government customers may be adjusted so as to simplify the rate structure and make the rates more consistent throughout Yukon;

mentaux ou des clients industriels majeurs;

(b) les tarifs pour chaque catégorie de client au détail non-gouvernemental s'appliquent, sous réserve du paragraphe (2), uniformément à la grandeur du Yukon et sans distinction entre la Yukon Energy Corporation et The Yukon Electrical Company Limited;

(2) Des primes de dépassement différentes sont permises à l'égard des clients au détail non-gouvernementaux pour refléter les coûts d'énergie supplémentaires à court terme dans les agglomérations approvisionnées principalement d'une autre source d'énergie que l'hydro-électricité. Toutefois,

(a) pour les clients résidentiels au détail non-gouvernementaux, la prime ne peut s'appliquer qu'à la consommation dépassant 1 000 kWh par mois;

(b) pour les autres clients au détail non-gouvernementaux, la prime s'applique à un des niveaux de consommation suivants qu'approuve la Commission:

(i) soit une consommation qui dépasse 2 000 kWh par mois;

(ii) soit une consommation dépassant le niveau qui serait, pour un client moyen de cette catégorie, l'équivalent de 2 000 kWh par mois pour les clients au détail non-gouvernementaux desservis par le service général.

#### Tarifs au détail pour les clients gouvernementaux

7.(1) La Commission fixe les tarifs pour les clients gouvernementaux selon la politique tarifaire énergétique du Yukon qui suit:

(a) les tarifs pour les clients gouvernementaux peuvent être ajustés, sous réserve de l'article 3, aux fins de simplifier la structure tarifaire et d'uniformiser les tarifs à la grandeur du Yukon;

(b) the rate for government customers in a community may not be lower than the rate for similar service to non-government retail customers in that community.

(2) Upon application of Yukon Energy Corporation, The Yukon Electrical Company Limited, or a customer, the Board must determine whether a customer is or is not a government customer.

#### Rates major and isolated industrial customers

8. (1) The Board must ensure that the rates charged to major industrial power customers, whether pursuant to contracts or otherwise, are sufficient to recover the costs of service to that customer class; those costs must be determined by treating the whole Yukon as a single rate zone and the rates charged by both utilities must be the same.

(2) Notwithstanding subsection (1), the Board must ensure that rates charged to Curragh Resources Inc. and United Keno Hill Mines Limited by Yukon Energy Corporation conform with any contract between Yukon Energy Corporation and Curragh Resources Inc. or United Keno Hill Mines Limited.

(3) Rates of isolated industrial customers served by Yukon Energy Corporation or The Yukon Electrical Company Limited must conform with any contract between the customer and Yukon Energy Corporation or The Yukon Electrical Company Limited and the costs and revenues related to those contracts may not be considered by the Board when establishing rates for other customers.

#### Wholesale rates

9. The Board must fix rates of Yukon Energy Corporation for the wholesale power customer in accordance with the following rate policy for Yukon:

(a) Yukon Energy Corporation shall sell electricity to The Yukon Electrical Company Limited at the same demand rate and the same energy rate

(b) le tarif pour les clients gouvernementaux dans une agglomération ne peut être moindre que le tarif pour un service semblable pour les clients au détail non-gouvernementaux dans cette agglomération.

(2) À la demande de la Yukon Energy Corporation ou de The Yukon Electrical Company Limited, ou d'un client, la Commission prend une décision sur le statut de client gouvernemental d'un client.

#### Tarifs pour les clients industriels majeurs et isolés

8. (1) La Commission doit s'assurer que les tarifs facturés aux clients industriels majeurs, en vertu d'un contrat ou autrement, suffisent à recouvrer les coûts du service pour cette catégorie de clients. Ces coûts sont déterminés en considérant tout le Yukon comme une zone tarifaire unique et les tarifs facturés par les deux services publics doivent être les mêmes;

(2) Sous réserve du paragraphe (2), la Commission doit s'assurer que les tarifs facturés à Curragh Resources Inc. et à United Keno Hill Mines Limited par la Yukon Energy Corporation se conforment à tout contrat intervenu entre la Yukon Energy Corporation et Curragh Resources Inc. ou United Keno Hill Mines Limited.

(3) Les tarifs pour les clients industriels isolés desservis par la Yukon Energy Corporation ou The Yukon Electrical Company Limited doivent être conformes à tout contrat intervenu entre le client et ces sociétés, et les coûts et les recettes dérivant de ces contrats ne sont pas pris en compte par la Commission aux fins de la fixation des tarifs pour les autres clients.

#### Tarifs de gros

9. La Commission doit réglementer les tarifs facturés par la Yukon Energy Corporation au client en gros selon la politique tarifaire du Yukon qui suit:

(a) la Yukon Energy Corporation vend de l'électricité à The Yukon Electrical Company Limited au même tarif de demande et au même tarif d'énergie à la

throughout the Yukon and those rates must be sufficient to enable Yukon Energy Corporation to recover its costs that are not recovered from its other customers;

(b) the wholesale rate to The Yukon Electrical Company Limited shall include appropriate provisions to ensure that Yukon Energy Corporation will recover its costs for retail and major industrial power service with adoption of the rates for retail power customers and major industrial power customers as specified herein.

#### Fuel price adjustment

10. The Board must permit Yukon Energy Corporation and The Yukon Electrical Company Limited to adjust their rates to retail customers, major industrial customers, and isolated industrial customers so as to reflect fluctuations in the prices for which the two utilities pay for diesel fuel, without the requirement for specific application to and approval of the Board.

#### Cost of service and rate design review and report

11. (1) The Board shall conduct a full review of costs of service to and of rates charged to all classes of customers within the Yukon and shall recommend appropriate methods of determining costs of service and appropriate principles for establishing rates to be used for rate applications made after 1991.

(2) When conducting its review and making its recommendations the Board shall observe the following guidelines:

(a) cost of service for each customer class must be determined on a Yukon-wide basis that is consistent with Yukon's rate policy, having the same rate for the same class of customer throughout the Yukon, no rate differentiation between utilities, and provision for runoff rate variations in accordance with the principles set out in subsection 6(2):

grandeur du Yukon et ces tarifs doivent suffire à la Yukon Energy Corporation pour recouvrer les coûts qui ne sont pas recouverts de ses autres clients;

(b) le tarif de gros facturé à The Yukon Electrical Company Limited comprend les mesures appropriées pour permettre à la Yukon Energy Corporation de recouvrer ses coûts de service au détail et ses coûts de service aux clients industriels majeurs au moyen de tarifs qui s'appliquent à ces services en vertu des présentes.

#### Ajustement du prix du combustible

10. La Commission permet à la Yukon Energy Corporation et à The Yukon Electrical Company Limited d'ajuster les tarifs facturés aux clients au détail, aux clients industriels majeurs et aux clients industriels isolés de manière à refléter les fluctuations des prix payés pour le mazout par ces deux sociétés, sans avoir à faire une demande particulière à la Commission pour obtenir son autorisation.

#### Révision et rapport sur le coût du service et la structure de tarifs

11. (1) La Commission procède à l'examen complet du coût de service en ce qui concerne les tarifs facturés à toutes les catégories de clients d'électricité du Yukon. Elle recommande une méthodologie pour fixer le coût de service et des principes appropriés pour établir une structure tarifaire applicable aux demandes de tarifs faites après 1991.

(2) La Commission suit, dans le cours de son examen et au moment de rédiger ses recommandations, les lignes directrices suivantes:

(a) le coût de service pour chaque catégorie de client est déterminé à la grandeur du Yukon d'une façon compatible avec la politique tarifaire du Yukon qui comporte un tarif unique pour les clients d'une même catégorie, un tarif unique pour tous les services publics et une disposition couvrant les variations entre les primes de dépas-

(b) customer classes examined must include each class currently used for rate making purposes;

(c) costs must be determined on a prospective basis for a test period conforming to the period for which the Board approves rates as a result of Yukon Energy Corporation's and The Yukon Electrical Company Limited's 1991 general rate applications;

(d) the review must investigate principles and methods currently applicable in Canada for similar hydro based and northern diesel service areas and must examine the implications of any options in this regard that may merit adoption in Yukon;

(e) the review must investigate the extent to which regulated rates reflect cost of service for different customer classes in Yukon and in other Canadian jurisdictions;

(f) the review must examine implications of adjusting future rates in order to bring rates closer to costs for all customer classes in Yukon.

(3) The review must also investigate the extent to which rate design should respond to factors other than cost of service for each customer class such as:

(a) promotion of economy and efficiency in the generation, transmission, distribution, and use of power;

(b) environmental or other costs that are not currently included in cost of service for the utilities;

(c) current cost required to develop new power supplies; and

sement, conformément aux principes énoncés au paragraphe 6(2);

(b) les catégories de clients sous examen comprennent toute catégorie utilisée présentement aux fins de fixer les tarifs;

(c) les coûts sont déterminés de façon prospective pour une période d'essai correspondant à celle pour laquelle la Commission approuve les tarifs suivant les demandes de tarifs de la Yukon Energy Corporation et de The Yukon Electrical Company Limited, pour l'année 1991;

(d) l'examen comprend l'étude des principes et méthodes en application au Canada pour des services dans des régions similaires desservies par l'hydro-électricité et dans des régions nordiques desservies par le combustible diesel. La Commission étudie les conséquences de toute option valable pour son implantation au Yukon;

(e) l'examen étudie jusqu'où les tarifs réglementés d'électricité reflètent le coût de service pour les différentes catégories de clients du Yukon et des régions relevant d'autres compétences au Canada;

(f) l'examen étudie les conséquences d'un ajustement des tarifs futurs en vue de rétrécir l'écart entre les tarifs et les coûts pour toutes les catégories de clients du Yukon.

(3) L'examen étudie également dans quelle mesure des facteurs autres que le coût de service pour chaque catégorie de client doivent être pris en compte aux fins de la structure tarifaire, notamment:

(a) la promotion d'une plus grande économie et d'une plus grande efficacité dans la production, la transmission et l'utilisation de l'électricité;

(b) les coûts environnementaux ou autres qui n'apparaissent pas dans le coût actuel de service pour les services publics;

(d) demand-side management activities carried out in accordance with the principles set out in subsections 5(1) and (2).

(4) The Board must begin its review by soliciting submissions from Yukon Energy Corporation and The Yukon Electrical Company Limited as part of their 1991 general rate applications and shall direct the companies to prepare such submissions in accordance with the guidelines set forth in subsection 11(2).

(5) The Board shall deliver its report to the Executive Council Member on or before June 1, 1992.

(c) le coût actuel exigé pour développer de nouveaux approvisionnements d'électricité;

(d) les activités pour gérer la demande exécutées en conformité avec les principes énoncés aux paragraphes 5(1) et 5(2).

(4) La Commission débute son examen en sollicitant les représentations de la Yukon Energy Corporation et de The Yukon Electrical Company Limited qui figurent dans leur demande de tarifs généraux pour l'année 1991; elle leur enjoint de soumettre leurs représentations en respectant les lignes directrices énoncées au paragraphe 11(2).

(5) La Commission remet son rapport au membre du Conseil exécutif le 1 juin 1992 au plus tard.

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PUBLIC UTILITIES ACT**

**PUBLIC UTILITIES ACT**

Pursuant to sections 17 and 18 of the *Public Utilities Act*, the Commissioner in Executive Council orders as follows:

1. Order-in-Council 1991/062 is hereby revoked.
2. The annexed Rate Policy Directive (1995) is hereby made.

Dated at Whitehorse, in the Yukon Territory, this 29th day of May, 1995.

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Commissioner of the Yukon

**DÉCRET 1995/090  
LOI SUR LES ENTREPRISES DE SERVICE PUBLIC**

**LOI SUR LES ENTREPRISES DE  
SERVICE PUBLIC**

Le Commissaire en conseil exécutif, conformément aux articles 17 et 18 de la *Loi sur les entreprises de service public*, décrète ce qui suit :

1. Le décret 1991/062 est, par les présentes, abrogé.
2. Les instructions sur la politique tarifaire (1995), paraissant en annexe, sont par les présentes adoptées.

Fait à Whitehorse, dans le territoire du Yukon, ce 29 mai 1995.

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Commissaire du Yukon

O.I.C. 1995/090  
PUBLIC UTILITIES ACT

RATE POLICY DIRECTIVE (1995)

Interpretation

1. In this Directive

“customer” refers to a purchaser of electricity; *«client»*

“government customer” means a retail customer

(a) who is a federal or territorial department or agency;

(b) a body, other than one carrying on a business with a view to making a profit, that derives all or substantially all of its funding from a body referred to in paragraph (a); *«client gouvernemental»*

“isolated industrial customer” means a customer engaged in manufacturing, processing, or mining and whose electrical service is not inter-connected with electrical service provided to any other customer; *«client industriel isolé»*

“major industrial customer” means a customer engaged in manufacturing, processing, or mining, whose peak demand for electricity exceeds 1 MW, but it does not include an isolated industrial customer; *«client industriel majeur»*

“province” has the same meaning as in the *Interpretation Act*; *«province»*

“retail customer” means a customer of Yukon Energy Corporation or of The Yukon Electrical Company Limited, other than a major industrial customer, an isolated industrial customer, or a wholesale customer; *«client au détail»*

“wholesale customer” means the Yukon Electrical Company Limited when it purchases electricity from Yukon Energy Corporation. *«client en gros»*

Normal return on equity

2.(1) Subject to subsection (2), the Board must include in the rates of Yukon Energy Corporation and the Yukon Electrical Company Limited provision to recover a fair return on their equity used to finance their rate base.

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LOI SUR LES ENTREPRISES DE SERVICE PUBLIC

INSTRUCTIONS SUR  
LA POLITIQUE TARIFAIRE (1995)

Définitions

1. Les définitions qui suivent s’appliquent aux présentes instructions :

«client» Acheteur d’électricité; *«client»*

«client au détail» Client de la Société d’énergie du Yukon ou de la Yukon Electrical Company Limited qui n’est ni un client industriel majeur, ni un client industriel isolé, ni un client en gros; *“retail Customer”*

«client en gros» La Yukon Electrical Company Limited lorsqu’elle achète de l’énergie de la Société d’énergie du Yukon; *“wholesale customer”*

«client gouvernemental» Client au détail qui est:

a) soit un organisme gouvernemental, un ministère fédéral ou territorial;

b) soit un organisme qui n’exploite aucune entreprise à des fins lucratives et dont le financement provient en totalité, ou pour l’essentiel, d’un organisme décrit à l’alinéa a); *“government customer”*

«client industriel isolé» Client qui se livre à une activité de fabrication, de traitement ou à l’exploitation d’une mine et dont l’approvisionnement en électricité est indépendant de celui de tout autre client; *“isolated industrial customer”*

«client industriel majeur» Client autre qu’un client industriel isolé qui se livre à une activité de fabrication, de traitement ou à l’exploitation d’une mine et dont la demande de pointe d’électricité dépasse 1 MW. *“major industrial customer”*

«province» S’entend d’une province au sens de la *Loi d’interprétation*. *“province”*

Rendement normal sur la valeur nette

2.(1) Sous réserve du paragraphe 2, la Commission doit prévoir dans les tarifs de la Société d’énergie du Yukon et de la Yukon Electrical Company Limited les mesures pour réaliser un rendement équitable sur leur valeur nette utilisé pour financer leurs tarifs de base.

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(2) The Board must include in the rates of the Yukon Energy Corporation provision to recover a fair return on the Corporation's equity, less one-half of one per cent (.5%).

(3) When finalizing the interim 1997 rates made by Board Order 1997-6, the Board may adjust the 1997 fair return provided on Yukon Energy Corporation's equity and on Yukon Electrical Company Limited's equity."  
*(Section 2 replaced by O.I.C. 1998/32)*

**Normal principles to apply**

**3.** Except to the extent otherwise stated by this Directive or the Act, the Board must review and approve rates in accordance with principles established in Canada for utilities, including those principles established by regulatory authorities of the Government of Canada or of a province regulating hydro and non-hydro electric utilities.

**Retail rates: non-government customers**

**4.(1)** The Board must fix rates for retail customers, other than government customers, in accordance with the following rate policy for Yukon,

(a) the rates for non-government retail customers must be sufficient to recover costs that are not to be recovered from government customers or from major industrial customers;

(b) rates for each class of non-governmental retail customer must be the same throughout the Yukon without variation between Yukon Energy Corporation and The Yukon Electrical Company Limited customers;

(2) The Board must fix a runoff rate block for each non-government retail customer class applicable to all consumption by each customer of the class in excess of a specified consumption level per billing period, and such specified consumption level per customer is not to be less than 1,000 kWh for residential non-government retail customers and 2,000 kWh for general service non-government retail customers.

(3) The Board must fix runoff rates for each non-

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(2) La Commission doit inclure dans les tarifs de la Société d'énergie du Yukon des mesures pour réaliser un rendement équitable sur la valeur nette de cette dernière, moins 5 dixièmes pour cent (.5 %).

(3) Lorsqu'elle met au point les tarifs intérimaires de 1997 établis par l'ordonnance 1997-6 de la Commission, cette dernière peut rajuster le rendement équitable de 1997 découlant de la valeur nette de la Société d'énergie du Yukon et de la Yukon Electrical Company Limited.  
*(Article 2 remplacé par décret 1998/32)*

**Application des principes normaux**

**3.** Sauf indication contraire dans les présentes instructions ou dans la Loi, la Commission examine et approuve les tarifs aux clients selon les principes établis au Canada pour des services publics, y compris les principes établis par les organismes régulateurs des gouvernements fédéral et provinciaux réglementant les entreprises de services publics, que ces derniers soient reliés à l'électricité ou pas.

**Tarifs au détail pour les clients non-gouvernementaux**

**4.(1)** La Commission fixe les tarifs pour les clients au détail non-gouvernementaux selon la politique tarifaire suivante pour le Yukon :

a) les tarifs pour les clients non-gouvernementaux doivent suffire à générer les recettes nécessaires afin de recouvrer les coûts, lesquels ne doivent pas être récupérés des clients gouvernementaux ou des clients industriels majeurs;

b) les tarifs pour chaque catégorie de clients au détail non-gouvernementaux s'appliquent uniformément à la grandeur du Yukon et sans distinction entre la Société d'énergie du Yukon et la Yukon Electrical Company Limited.

(2) La Commission doit déterminer une série de primes de dépassement pour chaque catégorie visée de clients au détail non-gouvernementaux, lesquelles s'appliquent à la consommation de chaque client qui excède un niveau de consommation déterminée, au cours d'une période de facturation et un tel niveau de consommation déterminé par client ne peut s'appliquer qu'à la consommation atteignant 1 000 kWh ou plus pour la catégorie résidentielle de clients au détail non-gouvernementaux et de 2 000 kWh pour la catégorie de services généraux de clients au détail non-gouvernementaux.

(3) La Commission doit déterminer des primes de

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government retail customer class on the basis of rate design principles to promote economy and efficiency, and separate runoff rates may be allowed in this regard for customers in different communities or rate zones, provided that such runoff rates for customers in each non-government retail customer class are fixed for each community or rate zone throughout Yukon in accordance with the same rate design principles.

**Retail rates: government customers**

**5.(1)** The Board must fix rates for government customers in accordance with the following power rate policy for Yukon

(a) rates for government customers may be adjusted so as to simplify the rate structure and make the rates more consistent throughout Yukon;

(b) the rate for government customers in a community may not be lower than the rate for similar service to non-government retail customers in that community.

(2) Upon application of Yukon Energy Corporation, The Yukon Electrical Company Limited, or a customer, the Board must determine whether a customer is or is not a government customer.

**Rates - major and isolated industrial customers**

**6.(1)** The Board must ensure that the rates charged to major industrial power customers, whether pursuant to contracts or otherwise, are sufficient to recover the costs of service to that customer class; those costs must be determined by treating the whole Yukon as a single rate zone and the rates charged by both utilities must be the same.

(2) Rates of isolated industrial customers served by Yukon Energy Corporation or The Yukon Electrical Company Limited must conform with any contract between the customer and Yukon Energy Corporation or The Yukon Electrical Company Limited and the costs and revenues related to those contracts may not be considered by the Board when establishing rates for other customers.

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dépassement pour chaque catégorie de clients au détail non-gouvernementaux sur la base de principes pour l'élaboration des taux afin de favoriser l'efficacité et l'économie et, dans cette optique, des primes de dépassement peuvent être permises à l'intention de clients demeurant dans différentes communautés ou dans des zones où les taux diffèrent, en autant que ces primes de dépassement dans chaque catégorie de clients au détail non-gouvernementaux soient les mêmes pour chaque communauté ou chaque zone tarifaire à travers le Yukon, conformément aux principes pour l'élaboration des tarifs.

**Tarifs au détail pour les clients gouvernementaux**

**5.(1)** La Commission fixe les tarifs pour les clients gouvernementaux selon la politique tarifaire énergétique du Yukon qui suit :

a) les tarifs pour les clients gouvernementaux peuvent être ajustés aux fins de simplifier la structure tarifaire et d'uniformiser les tarifs à la grandeur du Yukon;

b) le tarif pour les clients gouvernementaux dans une agglomération ne peut être moindre que le tarif pour un service semblable pour les clients au détail non-gouvernementaux dans cette agglomération.

(2) À la demande de la Société d'énergie du Yukon ou de la Yukon Electrical Company Limited, ou d'un client, la Commission prend une décision sur le statut de client gouvernemental d'un client.

**Tarifs pour les clients industriels majeurs et isolés**

**6.(1)** La Commission doit s'assurer que les tarifs facturés aux clients industriels majeurs, en vertu d'un contrat ou autrement, suffisent à recouvrer les coûts du service pour cette catégorie de clients. Ces coûts sont déterminés en considérant tout le Yukon comme une zone tarifaire unique et les tarifs facturés par les deux services publics doivent être les mêmes.

(2) Les tarifs s'appliquant aux clients industriels et isolés desservis par la Société d'énergie du Yukon ou la Yukon Electrical Company Limited doivent être conformes à tout contrat entre le client et ces sociétés; les coûts et les revenus liés à ces contrats ne peuvent être considérés par la Commission lorsqu'elle établit les tarifs pour d'autres clients.

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**Wholesale rates**

7. The Board must fix rates of Yukon Energy Corporation for the wholesale power customer in accordance with the following rate policy for Yukon:

(a) Yukon Energy Corporation shall sell electricity to The Yukon Electrical Company Limited at the same demand rate and the same energy rate throughout the Yukon and those rates must be sufficient to enable Yukon Energy Corporation to recover its costs that are not recovered from its other customers;

(b) the wholesale rate to The Yukon Electrical Company Limited shall include appropriate provisions to ensure that Yukon Energy Corporation will recover its costs for retail and major industrial power service with adoption of the rates for retail power customers and major industrial power customers as specified herein.

**Fuel Price adjustment**

8. The Board must permit Yukon Energy Corporation and The Yukon Electrical Company Limited to adjust their rates to retail customers, major industrial customers, and isolated industrial customers so as to reflect fluctuations in the prices for which the two utilities pay for diesel fuel, without the requirement for specific application to and approval of the Board.

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**Tarifs de gros**

7. La Commission doit déterminer les tarifs facturés par la Société d'énergie du Yukon au client en gros selon la politique tarifaire du Yukon qui suit :

a) la Société d'énergie du Yukon vend de l'électricité à la Yukon Electrical Company Limited au même tarif de demande et au même tarif d'énergie à la grandeur du Yukon et ces tarifs doivent suffire à la Société d'énergie du Yukon pour recouvrer les coûts qui ne sont pas recouverts de ses autres clients;

b) le tarif de gros facturé à la Yukon Electrical Company Limited comprend les mesures appropriées pour permettre à la Société d'énergie du Yukon de recouvrer ses coûts de service au détail et ses coûts de service aux clients industriels majeurs au moyen de tarifs qui s'appliquent à ces services en vertu des présentes.

**Ajustement du prix du combustible**

8. La Commission permet à la Société d'énergie du Yukon et à la Yukon Electrical Company Limited d'ajuster les tarifs facturés aux clients au détail, aux clients industriels majeurs et aux clients industriels isolés de manière à refléter les fluctuations des prix payés pour le mazout par ces deux sociétés, sans avoir à faire une demande particulière à la Commission pour obtenir son autorisation.



## **EXCERPTS FROM 1989/90 GRA FILING**

e) Fuel Price Adjustment Rider F

The Yukon Territorial Government, in OIC 1988/150 (Paragraph 3e), gave the following direction with respect to fuel adjustment:

**"the Board shall permit Yukon Energy Corporation and The Yukon Electrical Company Limited to adjust their rates so as to reflect fluctuations in the prices for which they contract for the supply of diesel fuel from time to time, without the requirement for specific application to and approval of the Board. Subject to the foregoing, the procedures respecting such rate adjustments shall be determined by the Board;"**

Yukon Electrical and Yukon Energy request that the Board approve Fuel Price Adjustment Rider F as contained in Section 8.0. Yukon Electrical and Yukon Energy propose that this fuel adjustment rider apply to all consumers in the Yukon. They submit that this is required to meet the conditions of Paragraphs 3(a) and 3(c) of OIC 1988/150; to enhance rate stability by spreading increases or decreases in fuel prices over a greater number of customers; and to simplify rates.

Since it is proposed that the fuel rider be the same for both the customers of Yukon Electrical and Yukon Energy, the fuel clause revenue (or refund) made to the customers of a utility will not reflect the changes in fuel costs of that utility. Yukon Electrical and Yukon Energy request that the Board approve inter-utility billing between them to ensure that the

utility incurring higher (or lower) fuel costs due to price changes has the correct increased (or decreased) fuel clause revenue.

f) Income Tax Rebates

As noted in Section 2.9 of Yukon Energy's filing, the Yukon Government will be rebating both federal and territorial income taxes paid by Yukon Electrical to non-government, non-industrial retail customers. Yukon Energy and Yukon Electrical have calculated the income tax rebate percentage to be approximately 4.37% for 1989 and 1990.

5.137.

g) Residential and General Service  
Non-Government

As required by Paragraph 3(c) of OIC 1988/150, non-government residential and general service customer rates are proposed to be made the same throughout the Yukon except for separate energy run-off rates. For the purpose of determining energy run-off rates, the Yukon was divided into four areas as follows:

- Area 1 - Hydro
- Area 2 - Large Diesel
- Area 3 - Small Diesel
- Area 4 - Old Crow

**RIDER F**  
**FUEL ADJUSTMENT RIDER**

**AVAILABLE:**

To all electric service throughout the Yukon Territory.

**APPLICABLE:**

To all classes of service.

**RATE:**

Service will be rendered at the applicable rates with the following surcharge/(refund) to cover changes in the unit cost of fuel.

An adjustment of 0.00 cents per kW.h will be applied to all kW.h consumed.

**NOTE:**

The change in this Rider will change in accordance with changes in the Company's fuel costs calculated on a unit basis by reference to kW.h sales. Such changes to the change in this Rider shall be implemented coincident with changes in the Company's costs of fuel or at such time as is practical.

## **1989-90 GRA IR RESPONSES**

The Yukon Electrical Company Limited  
1989/90 GRA  
Yukon Utilities Board  
Information Request No. 1  
February 10, 1989  
Item BD.-20  
Page 1 of 2

**BD.-20**

**Q.** Provide an explanation of the process by which contracts are arranged for the supply of fuel, including the following:

- (a) frequency of contract negotiations;
- (b) frequency of price adjustments permitted by contract;
- (c) relationship of unit price of fuel at each location to the total cost of generation;
- (d) the current unit cost of fuel at each location.

**A.** (a) Diesel fuel supply quotations are normally requested once per year for a twelve month contract period. In 1988 quotes were requested twice, each for a six month period. Normally about six suppliers will provide prices. Suppliers are invited to quote on requirements for Yukon Electrical, Yukon Energy, Northland and Alberta Power Limited. In some cases the supplier will offer discounts if all, or a group of locations, are contracted to that supplier. In 1989 this discount amounts to 0.5 cents per litre or approximately \$60 thousand.

(b) Price adjustments depend on the type of contract entered into. Currently, except for Old Crow, prices are adjusted upward or downward monthly according to a formula where the price tracks the cost of crude oil in Edmonton. For Old Crow, the price is firm until April 30, 1989 (fuel is normally delivered to Old Crow once per year and has been delivered for 1989).

The Yukon Electrical Company Limited  
1989/90 GRA  
Yukon Utilities Board  
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**BD.-20**

- (c) In 1987, fuel costs expressed as a percentage of total production costs for each plant location is as follows:

Watson Lake	61%	
Destruction Bay	52%	
Beaver Creek	64%	
Old Crow	83%	
Stewart Crossing	68%	
Pelly River	62%	
Swift River	60%	
Faro	19%	*
Dawson City	77%	*
Mayo	1%	*
Whitehorse	5%	*

\* YEC figures are for nine months only

- (d) The cost of fuel effective March 1, 1989 for all locations is as follows:

	<u>c/litre</u>
Destruction Bay	26.10
Beaver Creek	26.10
Stewart Crossing	27.15
Pelly River	27.15
Watson Lake	23.05
Dawson City	27.96
Mayo	40.71
Faro	29.76
Swift River	27.38
Whitehorse	23.68
Old Crow	69.40

February 27, 1989

The Yukon Electrical Company Limited  
Yukon Energy Corporation  
1989/90 GRA  
Yukon Utilities Board  
Information Request No. 1  
February 10, 1989  
**Item BD-21**

**BD-21**

- Q. Confirm that the companies intend that all rates in the Yukon will be affected equally by a change in the cost of fuel at one location.
- A. The Fuel Adjustment Rider will be implemented on a cents/kW.h basis for all energy consumed for all rates served under Board approved schedules with the exception of customers served under contracts which prohibit the application of the rider.

February 27, 1989

The Yukon Electrical Company Limited  
Yukon Energy Corporation  
1989/90 GRA  
Yukon Utilities Board  
Information Request No. 1  
February 10, 1989  
**Item BD-22**  
Page 1 of 2

**BD-22**

Q. Provide a sample proposed calculation of a fuel cost adjustment, including calculation of inter-company charge if applicable.

A. The attached schedule provides a sample calculation.

February 27, 1989

THE YUKON ELECTRICAL COMPANY LIMITED  
 SAMPLE CALCULATION OF PROPOSED FUEL COST RIDER

ITEM BD-22

	(1)	(2)	(3)	(4)	(5)	
	FORECAST COMMUNITY CENTS/LITRE	EFFICIENCY RATE KW.h/LITRE	FORECAST COST PER KW.h	MW.h FORECAST GENERATION	FORECAST FUEL COST	
1	DAWSON CITY	22.00	3.60	6.11	9,864	602,800
2	DESTRUCTION	28.00	3.10	9.03	1,184	106,942
3	PELLY RIVER	35.00	3.00	11.67	953	111,183
4	SWIFT RIVER	30.00	3.20	9.38	201	18,844
5	OLD CROW	45.00	2.80	16.07	1,133	182,089
6	TOTAL				13,335	1,021,858

	COMMUNITY	ACTUAL CENTS/LITRE	EFFICIENCY RATE KW.h/LITRE	ACTUAL COST PER KW.h	ACTUAL GENERATION	ACTUAL FUEL COST
7	DAWSON CITY	23.00	3.60	6.39	10,250	654,861
8	DESTRUCTION	33.00	3.10	10.65	1,200	127,742
9	PELLY RIVER	35.50	3.00	11.83	925	109,458
10	SWIFT RIVER	30.50	3.20	9.53	225	21,445
11	OLD CROW	42.00	2.80	15.00	1,150	172,500
12	TOTAL				13,750	1,086,007

	COMMUNITY	FORECAST PRICE FORECAST VOLUME	VOLUME VARIANCE	FORECAST PRICE ACTUAL VOLUME	PRICE VARIANCE	ACTUAL PRICE ACTUAL VOLUME
13	DAWSON CITY	602,800	23,589	626,389	28,472	654,861
14	DESTRUCTION	106,942	1,445	108,387	19,355	127,742
15	PELLY RIVER	111,183	(3,267)	107,917	1,542	109,458
16	SWIFT RIVER	18,844	2,250	21,094	352	21,445
17	OLD CROW	182,089	2,732	184,821	(12,321)	172,500
18	TOTAL	1,021,858	26,750	1,048,608	37,399	1,086,007

	COMMUNITY	FOLLOWING YEAR FORECAST SALES	RIDER REVENUE	PRICE VARIANCE	DIFFERENCE YECL	DIFFERENCE YEC
19	DAWSON CITY	9,420	27,978	28,472		
20	DESTRUCTION	1,078	3,202	19,355	(16,153)	(494)
21	PELLY RIVER	863	2,563	1,542	1,021	
22	SWIFT RIVER	181	538	352	186	
23	OLD CROW	1,050	3,119	(12,321)	15,440	
24	TOTAL	12,592	37,399	37,399	494	(494)

RIDER REVENUE COLLECTED BASED UPON A SINGLE FUEL CLAUSE RIDER , CENTS PER KW.h

THE TRANSFER AMOUNT BETWEEN YECL AND YEC WILL BE DETERMINED BY TAKING THE CUMULATIVE DIFFERENCE BETWEEN PRICE VARIANCE AND RIDER REVENUE.

24-Feb-89

## **BOARD ORDER 1989-1, 1989-2, 1989-5 AND 1990-2**

**YUKON UTILITIES BOARD  
INTERIM ORDER 1989-1**

Interim Approval of YECL  
Rates Effective April 1,  
1989

FOLLOWING IS

SCHEDULE "A"

(Consisting of 54 Pages)

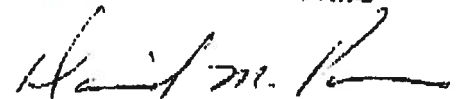
ATTACHED TO AND FORMING PART OF

YUKON UTILITIES BOARD

INTERIM ORDER 1989-1

DATED MARCH 17, 1989

YUKON UTILITIES BOARD



CHAIRMAN

RIDER F

FUEL ADJUSTMENT RIDER

AVAILABLE:

To all electric service throughout the Yukon Territory.

APPLICABLE:

To all classes of service.

RATE:

Service will be rendered at the applicable rates with the following surcharge/(refund) to cover changes in the unit cost of fuel.

An adjustment of 0.00 cents per kW.h will be applied to all kW.h consumed.

NOTE:

The change in this Rider will change in accordance with changes in the Company's fuel costs calculated on a unit basis by reference to kW.h sales. Such changes to the change in this Rider shall be implemented coincident with changes in the Company's costs of fuel or at such time as is practical.

Interim Approval of YEC  
Rates Effective April 1,  
1989

YUKON ENERGY CORPORATION

INTERIM ORDER 1989-2

DATED MARCH 17, 1989

5. ORDER

THE BOARD HEREBY ORDERS THAT:

1. The rates, tolls or charges set out in Schedule "A" attached hereto be and the same are hereby fixed and approved as interim rates to be effective for billings issued on and after April 1, 1989 for consumption on and after March 1, 1989.
2. The Electric Service Regulations set out in Schedule "B" attached hereto are hereby approved on an interim basis, effective April 1, 1989.
3. YEC inform its customers by notification on customers' bills or by way of a notice attached to customers' bills that the amount of customers' bills may be increased as a consequence of the expiry of Temporary Rate Reduction Rider E on March 31, 1990 and Temporary Rate Reduction Rider D on December 31, 1990.
4. The interim rates, tolls or charges, and Electric Service Regulations herein approved are subject to further review by the Board and may be changed as the Board may direct.

**RIDER F**

**FUEL ADJUSTMENT RIDER**

**AVAILABLE:**

To all electric service throughout the Yukon Territory.

**APPLICABLE:**

To all classes of service.

**RATE:**

Service will be rendered at the applicable rates with the following surcharge/(refund) to cover changes in the unit cost of fuel.

An adjustment of 0.00 cents per kW.h will be applied to all kW.h consumed.

**NOTE:**

The change in this Rider will change in accordance with changes in the Company's fuel costs calculated on a unit basis by reference to kW.h sales. Such changes to the change in this Rider shall be implemented coincident with changes in the Company's costs of fuel or at such time as is practical.

THE YUKON ELECTRICAL COMPANY LIMITED  
and YUKON ENERGY CORPORATION

DECISION 1989-5

DATED OCTOBER 20, 1989

5. FUEL CLAUSE ADJUSTMENT RIDER (Rider F)

The Companies' rate schedules contain a fuel clause adjustment rider (Rider F) whereby rates may be adjusted without a public hearing to reflect changes in the Companies' unit cost of fuel from time to time.

The Board directs that the Companies report their actual unit costs of fuel on a quarterly basis, together with appropriate proposals for adjustments to Rider F as required from time to time for Board approval.

The Board further directs that details of all future arrangements for the purchase of fuel be provided to the Board on a timely basis.

# 1990-2

YUKON UTILITIES BOARD

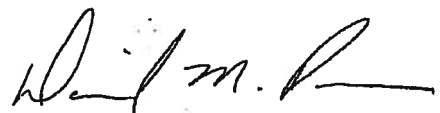
PAGE 6

DECISION 1990-2

5. The interim rates, tolls and charges approved in Decisions 1989-1 and 1989-2 are hereby fixed and approved as just, reasonable and final rates, tolls and charges for the period from April 1, 1989 to April 1, 1990.

DATED AT WHITEHORSE, YUKON THIS 1st DAY OF MAY, 1990.

YUKON UTILITIES BOARD



CHAIRMAN

**YUKON UTILITIES BOARD  
ORDER 1990-2**

**FOLLOWING IS  
SCHEDULE A  
(Consisting of 54 pages)  
ATTACHED TO AND FORMING PART OF  
YUKON UTILITIES BOARD  
ORDER 1990-2**

**DATED MAY 1ST, 1990**

**RIDER F**  
**FUEL ADJUSTMENT RIDER**

**AVAILABLE:** To all electric service throughout the Yukon Territory.

**APPLICABLE:** To all classes of service.

**RATE:** Service will be rendered at the applicable rates with the following surcharge/(refund) to cover changes in the unit cost of fuel.

An adjustment of 0.00 cents per kW.h will be applied to all kW.h consumed.

**NOTE:** The change in this Rider will change in accordance with changes in the Companies' fuel costs calculated on a unit basis by reference to kW.h sales. Such changes to the change in this Rider shall be implemented coincident with changes in the Companies' costs of fuel or at such time as is practical.

# 2003-3

**AN ORDER IN THE MATTER OF the Public Utilities Act  
Revised Statutes, 1986, c. 143, as amended**

**And**

**A Yukon Energy Corporation Application to Amend Rider F**

**BEFORE:**            B. Morris, Chair            )  
                          W. Shanks, Vice-Chair    )  
                          G. Leslie                    ) January 29, 2003  
                          R. Hancock                )  
                          M. Phillips                 )

**ORDER 2003-03**

**WHEREAS:**

- A. On December 23, 2002, Yukon Energy Corporation ("YEC") informed the Board that it was close to completing its Mayo to Dawson City Transmission System project and applied to amend Rider F to include collection of fuel costs that would have been incurred for diesel generation at Dawson City had it continued to be served by diesel generation ("the Application"); and
- B. Rider F is required by Order-in-Council 1995/90 to permit YEC and The Yukon Electrical Company Limited ("YECL") to adjust their rates to reflect fluctuations in the prices paid for diesel fuel without the requirement for specific application to and approval of the Board; and
- C. The Board has reviewed the Application and supporting material.

**NOW THEREFORE** the Board orders that:

- 1. In accordance with the Reasons attached as Appendix A, the Application to amend Rider F is denied.

Dated at the City of Whitehorse, in the Yukon Territory, this 5th day of February 2003.

**BY ORDER**



Brian Morris  
Chair

## YEC APPLICATION TO AMEND RIDER F

### **Background**

As explained in an August 29, 2000, letter to the Board, the directors of Yukon Development Corporation ("YDC") and Yukon Energy Corporation ("YEC"), with the approval of the Minister Responsible for YDC, decided to proceed with the construction of a transmission line to utilize surplus hydro power from its Mayo system to replace high cost diesel generation in Dawson City ("the Project"). YDC was to provide a non-repayable capital contribution and flexible debt financing to ensure that ratepayers were not adversely affected in any year of the Project. YEC stated that market and cost impact risks related to the Project were being borne by YDC.

The Board had previously reviewed proposals by YEC and The Yukon Electrical Company Limited ("YECL") in respect of major capital projects, pursuant to a directive of Order-in-Council 1992/92. In its 1992 Capital Plan Report to the Commissioner in Executive Council, the Board recommended that no further studies be performed on the Mayo-Dawson transmission projects, unless demand changed sufficiently to warrant a further review of the project.

In response to Utilities Consumers' Group ("UCG") complaints about the lack of regulatory review in 2000 and 2001, YEC reiterated that the flexible financing concept would protect ratepayers from short-term negative impacts on rates, and explained its position that there was no requirement under the *Public Utilities Act* for it to obtain approval from the Board before proceeding with the Project. In its May 29, 2001, letter to UCG, the Board agreed with YEC, and noted that the *Public Utilities Act* does not permit the holding of a public hearing without the approval of the government. In an August 24, 2001, response to a request from the Board, the Minister of Justice confirmed that a hearing on the Project was not required at that time.

### **Rider F**

Rider F is a fuel adjustment rider in the tariffs originally filed by YEC and YECL and approved by the Board. The Rider, which is applicable to all classes of service, except Rate Schedule 32 and Rate Schedule 40, states as follows:

"RATE: Service will be rendered at the applicable rates with the following surcharge (refund) to cover changes in the unit cost of fuel.

An adjustment of 0.XXXX cents per kW/h surcharge will be applied to a kWh consumed.

NOTE: The change in this Rider will change in accordance with changes in the Companies' fuel costs calculated on a unit basis by reference to kW.h sales. Such changes to the change in this Rider shall be implemented coincident with changes in the Companies' costs of fuel or at such time as is practical."

Rider F is designed to adjust rates for actual diesel fuel price differences vs. the fuel price implicit in the rates. YEC and YECL periodically check to see if the existing rider will be sufficient to recover price shortfalls over a reasonable period given updated diesel consumption, price and sales forecasts. They then decide whether it is practical to make a change and inform the Board of a fuel price adjustment designed to recover the deficiency (or surplus) over the next year.

### **Application to Amend Rider F**

On December 23, 2002, YEC provided a Project update and applied to amend Rider F by adding the following note:

"For purposes of Rider F, 'fuel costs' of Yukon Energy shall include such costs that would have been incurred for diesel fuel at Dawson City if the transmission system from Mayo had not been built."

The Application states that the amendment is "needed to ensure that the amount paid by ratepayers under Rider F is not affected by the changes to Yukon Energy's actual diesel requirements due to the Mayo-Dawson project." According to YEC, if the current Rider F rate is retained, the amount paid by ratepayers under Rider F would be reduced as a result of the changes to Yukon Energy's actual diesel requirements due to the Mayo-Dawson project.

YEC expects that, in 8 to 10 years, actual costs for supplying power to Dawson City with the new transmission system are expected to be less than the costs if Dawson City had continued to be supplied by diesel generation, at which time it would apply to re-adjust Rider F.

### **Board Summary and Conclusions**

Rider F exists as a consequence of Order-in-Council 1995/90, issued in 1995 as a rate directive to the Board, which states in Section 8:

"The Board must permit Yukon Energy Corporation and The Yukon Electrical Company Limited to adjust their rates to retail customers, major industrial customers and isolated industrial customers so as to reflect fluctuations in the prices for which the two utilities pay for diesel fuel, without the requirement for specific application to and approval of the Board."

The directive does not remove the Board's power or jurisdiction to regulate rates under the *Public Utilities Act*, but the interpretation and application of the directive is also a matter within the jurisdiction of the Board. YEC asserts that there is still no requirement for the Board to approve the decision to construct the project or to assess the prudence of any expenditure because this Application does not seek to recover the cost of the Project through rates. The amendment to Rider F does, however, seem to be required to help finance the Project and, if approved, would prevent rates from being lowered through the current mechanism.

The Board's interpretation of Section 8 of Order-in-Council 1995/90 is that it was intended that the Rider allow the Companies to adjust their rates to reflect fluctuations in prices paid for diesel fuel, not to help finance the cost of a new transmission line.

The project was approved by the Minister Responsible for Yukon Development Corporation. If the government wanted the Board to require ratepayers to help finance the line, it could have done so at any time, either by amending the Order-in-Council, or by issuing a special directive to the Board under Section 17 of the Act. Alternatively, YEC could file a General Rate Application, with a request that the project be added to rate base and the costs recovered from ratepayers.

The Application to amend Rider F is denied.





Page 1 of 1  
Effective: 2011 07 01  
Supercedes: 2010 01 01

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**RIDER F**  
**FUEL ADJUSTMENT RIDER**

- AVAILABLE:** To all electric service throughout the Yukon Territory.
- APPLICABLE:** To all classes of service.
- RATE:** Service will be rendered at the applicable rates with the following surcharge/(refund) to cover changes in the unit cost of fuel.
- An adjustment of 0.352 ¢ per kW.h surcharge will be applied to all kWh consumed.
- NOTE:** The change in this Rider will change in accordance with changes in the Companies' fuel costs calculated on a unit basis by reference to kW/h sales. Such changes to the change in this Rider shall be implemented coincident with changes in the Companies' costs of fuel or at such time as is practical.
- Rider F does not apply to Rate Schedule 32 Secondary Energy.

---

Approved in Board Order 2011-05 (April 28, 2011)  
YECL/YEC Joint 2009 Phase II



1 **REFERENCE: Application**

2

3 **ISSUE/SUB-ISSUE: Companies' Rider F & DFPVA quarterly and annual report**  
4 **processes**

5

6 **QUOTE:**

7

8 **Fuel Price adjustment**

9 **8.** The Board must permit Yukon Energy Corporation and The Yukon Electrical  
10 Company Limited to adjust their rates to retail customers, major industrial customers,  
11 and isolated industrial customers so as to reflect fluctuations in the prices for which the  
12 two utilities pay for diesel fuel, without the requirement for specific application to and  
13 approval of the Board<sup>1</sup>.

14

15 ...OIC 1995/90 provides for fuel price adjustments without requirement for specific  
16 application to and approval of the Board 5<sup>2</sup>.

17

18 **PREAMBLE:**

19

20 The Board would like to understand the calculations that form the basis for the  
21 Companies' proposed rider quarterly report and the Companies' understanding in  
22 respect of future dispute resolution mechanism that may or may not be in place  
23 respecting future quarterly DFPVA reports.

24

25 **QUESTION:**

26

27 a) To facilitate the Board and intervenors in respect of this application, please  
28 provide Exhibit 1<sup>3</sup>, of the Companies' Rider F policy submission, in Excel  
29 spreadsheet format with all formulas intact and appropriate explanations, i.e.  
30 footnote where the forecasts underlying the DFPVA balances have been  
31 approved. Please provide all supporting documentation.

---

<sup>1</sup> OIC 1995/90.

<sup>2</sup> UCG-YEC/YECL-1-2(f).

<sup>3</sup> "Sample Rate Change Advisory to YUB".

- 1 b) With respect to part (a), please provide the calculations underlying the carry-  
2 forward DFPVA balances (e.g. due from YECL customers as at April 30, 2011 -  
3 139,133) and when and if these carry-forward balances have received Board  
4 approval.  
5
- 6 c) Please explain the mechanism in place for testing of the retail sales forecast and  
7 more specifically the underlying generation forecast, both hydro and diesel for  
8 the period May 2011 - May 2012 (Exhibit 1 - see footnote 6).  
9
- 10 d) Do the Companies propose to use the underlying generation forecasts in part (c)  
11 in order to determine future monthly DCF and DFPVA calculations? Please  
12 explain fully and provide all supporting documentation.  
13
- 14 e) Please provide the Exhibit 2<sup>4</sup>, of the Companies' Rider F policy submission, in  
15 Excel spreadsheet format with all formulas intact. Please provide supporting  
16 documentation and clearly explain the monthly determinations under the  
17 columnar headings.  
18
- 19 f) In LE-YEC/YECL- 1 -2 (f) the Companies submit that "Rider F charges or rebates  
20 to customers do not affect the income of the Companies." Please explain fully  
21 what is meant by the submission. Is it the Companies submission that there is no  
22 need for Rider F and by extension a DFPVA? Please explain fully and provide  
23 supporting documentation.  
24
- 25 g) Please confirm that Rider F rates are applied to industrial customers. If not, why  
26 not? Please provide supporting documentation.  
27
- 28 h) Does OIC 1995/90 take away the ability of intervenors to dispute the utility  
29 calculations in respect of Rider F? Please explain fully and provide supporting  
30 documentation.  
31
- 32 i) Please explain the mechanism that is in place for an interested party to dispute  
33 the rates?

---

<sup>4</sup> "Quarterly and Annual Reporting Processes".

1 **ANSWER:**

2  
3 **(a)**

4  
5 Please see Attachment 1 to this response. Note that the only GRA approved forecast  
6 used to calculate deferrals to the DFPVA is the GRA fuel price forecast. The monthly  
7 fuel volume forecasts used to calculate DFPVA amounts are not based on GRA  
8 forecasts. By way of example, and to help clarify the calculations and inputs that underlie  
9 Exhibit 1, columns M through AY provide additional detail regarding the specific YEC  
10 inputs into the Exhibit 1 column titles.

11  
12 Referring to the Exhibit 1 Sample Rate Change Advisory to YUB, an explanation by  
13 column title is as follows:

- 14  
15 • **Fuel Price in Rates** – GRA approved cost per litre.
- 16  
17 • **Forecast Fuel Price** – Total Forecast Cost of Fuel divided by Forecast number  
18 of litres to arrive at a blended forecast cost per litre for fuel to be purchased  
19 during the forecast period<sup>5</sup>.
- 20  
21 • **Forecast Litres** – Forecast litres per most recent available business plan. The  
22 Companies' business plan for 2011 would include a diesel forecast by community  
23 based on forecast diesel generation divided by an efficiency factor for each  
24 community to achieve number of litres. As part of the Rider F calculation process  
25 the BP 2011 forecast was reviewed and adjusted to reflect current factors. For  
26 example, with respect to YEC, with the grids being connected in June 2011 the  
27 dispatch of hydro and diesel will differ for the upcoming winter. As the exact  
28 profile of how the connected grid will operate was not known at the time of  
29 preparing the Rider F calculation, estimated amounts were incorporated into the  
30 calculation as a provision for peaking diesel during winter months. The resultant

---

<sup>5</sup>Forecast actual cost per litre – for YEC and YECL, at the date of preparation this would have been the most recent monthly fuel price provided by YEC's fuel suppliers for each month. This is the usual proxy value used for the estimated Actual price. In times of significant volatility the Companies have increased the estimated fuel price per litre if news regarding current events suggests the price of a barrel of oil may increase in the near future.

1 forecast was 1.5 million less litres than the actual consumption experienced from  
2 December 2010 to March 2011.

- 3
- 4 • **Monthly Shortfall** – Estimated diesel fuel price variance for forecast period.
  - 5
  - 6 • **Secondary Sales Adjustment** – No secondary sales forecast during the  
7 forecast period therefore no RS 32 Secondary Sales Rebate to offset DFPV<sup>6</sup>.
  - 8
  - 9 • **Combined YEC/YECL Shortfall (Over-collection)** – This is the DFPVA balance  
10 at April 2011 plus the diesel fuel price variances estimated over the forecast  
11 period.
  - 12
  - 13 • **Forecast Retail Sales (kW.h's)** – Is the sum of the YEC and YECL sales for the  
14 forecast period. Monthly sales per business plan for 2011 as approved by YEC's  
15 board of directors as part of the annual business planning process and YECL's  
16 Management for its business plan. As these sales are for BP2011/2012 they  
17 have not been reviewed and approved via a GRA process. Variance between  
18 forecast versus actual sales typically has minimal impact on the calculation of the  
19 Rider F rate or the overall collection of Rider F.
  - 20
  - 21 • **Rider F Rate** – Is the Shortfall divided by the Retail sales to arrive at a Rider F  
22 rate per kWh. Within the spreadsheet is a calculation that indicates that the .352  
23 cents/kWh rate is comprised of .07 cents/kWh to offset the DFPVA balance and  
24 .282 cents/kWh for the DFPV over the forecast period.

25  
26 **(b)**

27  
28 For calculations underlying the carry-forward DFPVA balances please refer to excel  
29 spreadsheet for Exhibit 2 provided as Attachment 1 to YUB-YEC/YECL-1-2(e). Cell L22  
30 of Exhibit 2 references the \$139,133 value recorded in Exhibit 1. In Exhibit 2 as provided  
31 in part (c) the data by Company is provided by month and shows the DFPVA and Rider  
32 F balance for each Company.

---

<sup>6</sup> The RS 32 adjustment is exclusive to YEC. At the time of preparation of this calculation no secondary sales were forecast as surplus hydro was not forecast to be available during the forecast period and secondary sales were forecast to be suspended.

1 Pursuant to current policy and existing practice the carry-forecast DFPVA balances do  
2 not receive Board approval per se. Section 8 of OIC 1995/90 provides that Yukon  
3 Energy Corporation and The Yukon Electrical Company Limited can adjust their rates to  
4 retail customers, major industrial customers, and isolated industrial customers so as to  
5 reflect fluctuations in the prices for which the two utilities pay for diesel fuel, without the  
6 requirement for specific application to and approval from the Board.

7  
8 The DFPVA balances are the outcome of diesel fuel price variance versus Rider F  
9 collections. The DFPVA is calculated using the fuel price rates and GRA forecast plant  
10 efficiencies as approved during the GRA process. Rider F collections are determined by  
11 actual sales times the Rider F rate/kWh. The Rider F rate is not approved by the YUB as  
12 the Companies have historically simply submitted rate change advisories when a rate  
13 change is required to take place to rebalance the process.

14  
15 At each GRA since 1988 base rates have been expected to be adjusted to reflect the  
16 fuel price forecast for the GRA, and to enable the Rider F determination to restart from  
17 this new reference point. Accordingly, the Board during each GRA has had the  
18 opportunity to review the DFPVA and address any issues relating to DFPVA accounts  
19 during that process prior to approving test year forecasts and rates.

20  
21 **(c)**

22  
23 There are many areas within the Rider F calculation where variances within the forecast  
24 will occur. When the Companies calculate a Rider F rate it has typically been done with  
25 the goal of recovering existing DFPVA balances plus estimated diesel fuel price  
26 variances within a one year period. The actual result is that due to the variances in sales  
27 or diesel generation that will inevitably occur, the Rider F rate may be in effect for a  
28 longer or shorter period depending on how actual Rider F collections (based on actual  
29 sales) offset diesel fuel price variances (based on actual diesel generation). Therefore,  
30 the forecasting of variances eventually encountered become an issue of duration, as to  
31 how long the rate will be in effect, and not over-collection from rate payers as the Rider F  
32 rate will be adjusted by the Companies to a new rate once the DFPVA balance has  
33 gravitated back to zero. As recently occurred, the Rider F rate may also be set to rebate  
34 amounts to customers - and the same comments and issues apply in such instances to  
35 the duration of the rebate Rider F rate.

1    **Sales Forecast:**

2  
3    The annual business plan cycle for YEC involves forecasting sales by rate class as  
4    follows:

- 5  
6       •   **Retail Sales** – Retail sales (Residential and General Service) are forecast on a  
7       community basis for retail customers. An average Use per Customer (UPC) is  
8       determined based on the prior three years to forecast the usage for the upcoming  
9       business plan year. Adjustments may be made to reflect recent weather patterns  
10      and to add in any known projects or developments that may impact Retail sales  
11      in a given community. Sales by community are aggregated to form a Retail sales  
12      forecast by rate class.
- 13  
14      •   **Industrial** – Industrial sales are forecast through comparison of sales over the  
15      past year adjusted to reflect revisions in operations in the upcoming year as  
16      communicated between YEC and its Industrial customers. When applicable, new  
17      customers are incorporated into the forecast at forecast energy volumes and  
18      loads. Existing Industrial customers are required to provide advance notice for  
19      sizeable increases in load to ensure that YEC infrastructure is able to  
20      accommodate the service required to the industrial site.
- 21  
22      •   **Wholesale Sales to YECL** – A monthly Wholesale sales forecast is initially  
23      prepared by YECL and presented to YEC for review. The review compares  
24      month by month sales of the past year against the values forecast by YECL for  
25      the upcoming year. As a monitoring point, experience of the past decade has  
26      been to expect 2.0 – 2.25% annual growth in Wholesale sales to YECL. Other  
27      factors, such as secondary sales or Fish Lake #1 being out of service, are  
28      incorporated into the forecast to arrive at a forecast Wholesales sales volume for  
29      the upcoming year.

30  
31    The monthly sales for Retail, Industrial and Wholesales sales are consolidated to create  
32    the sales forecast. A provision for line loss and station service is added to the sales  
33    forecast to determine the overall energy requirements to be met by hydro or diesel  
34    generation. This information is fed into the generation forecast.

1 In response to the Board's question, further information is provided below as to how  
2 such generation business plan forecasts are prepared by YEC:

3  
4 **Generation Forecast:**

5  
6 For YEC's 2011 business plan a generation model of YEC generation facilities was used  
7 to forecast the amount of available hydro which when applied against the sales forecast,  
8 with line losses, estimated the amount of diesel required for 2011.

9  
10 To feed the model the Sales Forecast is broken down into weekly allotments which are  
11 plugged into the generation model. The model uses current reservoir levels and long  
12 term average inflows to estimate available hydro. Any remaining amount is assumed to  
13 be served by diesel. This model then estimates the baseload diesel required to meet the  
14 sales forecast. Additional diesel is then added to address known projects. YEC is also  
15 refining the model to emulate temperature fluctuations encountered during winter  
16 months to more accurately predict peaking diesel requirements necessitated by extreme  
17 cold weather.

18  
19 For the period of May 2011 – May 2012 the sales used for the Rider F calculation were  
20 unaltered from the 2011/2012 business plan values. Any minor variance between  
21 forecast versus actual sales would not materially change the cents/kWh rate for Rider F  
22 so there is very little value in reworking the sales forecast from the bottom up in  
23 March/April when the calculation was prepared.

24  
25 The diesel generation forecast performed in November 2010 for 2011 was used to  
26 determine baseload diesel requirements consistent with the 2011 business plan. The  
27 only alteration made to the diesel forecast was to add a small provision for peaking  
28 diesel during winter months (2.5 MWh or 700 litres) to compensate for weaknesses  
29 observed in the model when comparing estimated to actual results for winter 2010/11.  
30 This adjustment takes place within the Rider F rate calculation only, to forecast the likely  
31 diesel fuel price variance that will be encountered during the forecast period, and does  
32 not constitute a formal alteration to YEC's 2011 business plan.

33  
34 Yukon Electrical relies on its most recent Sales forecast for each isolated diesel  
35 community to provide the basis for the diesel generation forecast in Rider F applications.

1 The community forecast of total kWh is applied to the average heat rate for each diesel  
2 community and summarized to provide the total forecast litres consumed by month,  
3 which is included in the Rider F filing.

4  
5 **(d)**

6  
7 For DFPVA see (c) above as to the continued use of forecasts to determine future Rider  
8 F rates. DFPVA calculations regarding actual fuel price variances from GRA approved  
9 fuel prices for any given month are based on actual generation and not on forecast  
10 generation requirements.

11  
12 For the DCF, no DCF calculations are done on a future/forecast generation basis  
13 (beyond reference to long term average hydro generation assessments as applicable),  
14 i.e., all DCF calculations are done only on the basis of actual diesel generation as  
15 impacted by actual hydro generation relative to approved long term average hydro  
16 generation.

17  
18 **(e)**

19  
20 Please see Attachment 1 to this response which provides Exhibit 2 in Excel format with  
21 all formulas intact.

22  
23 Monthly determinations under the column headings are supported by the following:

- 24
- 25 • **Fuel Price Variance** – Please see YUB-YC/YECL-2-3-(e) for DFPV 2010 and  
26 DFPV-2011-YTD Sep 11 for detailed calculations by month.
  - 27  
28 • **RS32 SS Adjustment** – A spreadsheet is attached which details the monthly  
29 amounts. This is the difference between the YUB approved rate for secondary  
30 sales and the quarterly rate charged to customers per the quarterly secondary  
31 sales rate adjustment. During the period illustrated on Exhibit 2 the quarterly rate  
32 charged customers was less than the YUB approved rate which resulted in funds  
33 flowing from the DFPVA to YEC.
- 34

- 1       • **Rider F Surcharge Industrial** – Rider F (variable) is charged to Industrial  
2 customers at the same rate as applies to Retail Customers. Please see UCG-  
3 YEC/YECL-1-12 for Rider F monthly amounts.  
4
- 5       • **Rider F Surcharge – CIS** – this is the Rider F as charged through the customer  
6 billing system administered by YECL. This amount is derived from monthly  
7 reports which summarize sales activity on CIS.  
8
- 9       • **Inter-Company Transfer** – This calculation distributes Rider F collections for the  
10 month to reflect the proportionate share of the DFPVA that each Company is  
11 carrying. This ensures neither Company is carrying a disproportionate share of  
12 the cumulative balance of the DFPVA. The Companies do not charge or collect  
13 interest on DFPVA balances.  
14

15 **(f)**

16  
17 It is assumed that this IR intends to reference the response to UCG-YEC/YECL-1-2(f).  
18

19 The referenced response was intended to respond to the IR as posed and to note that  
20 under the Rider F mechanism, differences between GRA fuel price and actual fuel prices  
21 will affect the Rider F account and not the earnings of the Companies – and that  
22 adjustments to the Rider F charges as such (which appeared to be the focus of the UCG  
23 IR) therefore do not affect the earnings of the Companies. See LE-YEC/YECL-1-7  
24 REVISED.  
25

26 Clearly, absent a Rider F mechanism the Companies' earnings would be affected by  
27 differences between GRA fuel prices and actual fuel prices (and there would be no Rider  
28 F account). It is not the Companies' submission that there is no need for Rider F or by  
29 extension a DFPVA.  
30

31 **(g)**

32  
33 Confirmed. Please see response to UCG-YEC/YECL-1-12 REVISED.

1 **(h) and (i)**

2

3 No. When Rider F is adjusted, the Rider F calculations are provided to the Board (the  
4 Companies also now provide Quarterly updates). Intervenors have the opportunity to  
5 review this information and if there is an issue or concern raise this with the Board  
6 through the complaint process or at future GRA proceedings. The Companies have  
7 responded during past GRAs to IRs related to Rider F records and calculations.

**The Yukon Electrical Company Limited**  
**Yukon Energy Corporation**  
**Rider F Calculation**  
**As At April 30, 2011**  
**(Forecast Implementation Date in CIS = July 1, 2011)**

**The Yukon Electrical Company Limited**

	Fuel Price in Rates	Forecast Fuel Price	Forecast Litres	Monthly Shortfall	
Due From (To) Customers - as at March 31, 2011					139,133
Apr-11 Estimated Net				-	
May-11	96.07	110.00	379,272	52,833	
Jun-11	96.07	110.00	386,624	53,857	
Jul-11	96.07	110.00	361,587	50,369	
Aug-11	96.07	110.00	411,149	57,273	
Sep-11	96.07	110.00	376,638	52,466	
Oct-11	96.07	110.00	454,678	63,337	
Nov-11	96.07	110.00	481,685	67,099	
Dec-11	96.07	110.00	563,842	78,543	
Jan-12	96.07	110.00	541,606	75,446	
Feb-12	96.07	110.00	525,850	73,251	
Mar-12	96.07	110.00	439,093	61,166	
Apr-12	96.07	110.00	407,436	56,756	
May-12	96.07	110.00	380,031	52,938	
Sub total			5,709,491	795,332	<u>795,332</u>
<b>YECL Shortfall (Over-collection)</b>					<u><b>934,465</b></u>

	(F/E) Fuel Price in Rates	(G/E) Forecast Fuel Price	(E) Forecast Litres	(H) Monthly Shortfall	(B) Secondary Sales Adjmt	
Due From (To) Customers - as at April 30, 2011						144,384
May-11 Estimated Net DFPV & Collections				17,929		
Jun-11	97.57	113.69	607,955	98,002	-	
Jul-11	97.57	113.69	1,549	250	-	
Aug-11	97.57	113.69	1,576	254	-	
Sep-11	96.90	111.03	75,887	10,720	-	
Oct-11	97.71	113.47	436,104	68,747	-	
Nov-11	97.57	113.69	1,233	199	-	
Dec-11	96.68	110.16	295,255	39,790	-	
Jan-12	96.74	109.38	258,904	32,713	-	
Feb-12	96.79	109.30	258,675	32,372	-	
Mar-12	96.78	109.29	257,829	32,236	-	
Apr-12	97.57	113.69	45,795	7,382	-	
May-12	97.57	113.69	41,287	6,655	-	
Sub total			2,282,050	347,251	-	<u>347,251</u>
<b>YEC Shortfall (Over-collection)</b>						<u><b>491,635</b></u>
<b>Combined YEC/YECL Shortfall (Over-collection)</b>						<u><b>1,426,100</b></u>

Forecast Retail Sales (kwh's) - May 2011- May 2012

YECL					322,818,549	
YEC - Retail	(A)				35,244,105	
YEC - Industrial	(A)				46,964,110	
Total						<u>405,026,763</u>
<b>Rider F Rate</b>	- price per kwh (cents) to recover forecast shortfall by April 30,2012					<u><b>0.352100106</b></u>

0.000700  
0.002821

100701 Rider F Rate -0.090560939  
Rate increase (decrease) 0.4427 cents/kWh



Rider F - Fuel Adjustment Rider  
Diesel Fuel Price Variances and Rider F Surcharges

	YEC						YECL				Combined Company Balances				
	Fuel Price Variance	RS 32 SS Adjustment	Rider F Surcharge - Industrial	Rider F Surcharge - CIS	Inter-company Transfer	Balance	Fuel Price Variance	Rider F Surcharge - CIS	Inter-company Transfer	Balance	Fuel Price Variance	RS 32 - SS Adjustment	Rider F Surcharge	Cumulative Balance	Monthly Change
Dec-09						(0)				297,046				297,046	
Jan-10	9,601.21	(9,969)	(7,642)	(11,823)	19,833	(0.00)	52,671	(114,166)	(19,833)	215,718	62,272	(9,969)	(133,631.71)	215,718	(81,328)
Feb-10	1,685.83	(10,746)	(7,731)	(10,052)	26,843	(0.00)	66,639	(90,090)	(26,843)	165,424	68,325	(10,746)	(107,872.83)	165,424	(50,294)
Mar-10	609.48	(12,815)	(9,337)	(9,138)	30,681	(0.00)	52,622	(85,982)	(30,681)	101,383	53,231	(12,815)	(104,456.91)	101,383	(64,040)
Apr-10	5,088.02	(9,410)	(7,404)	(9,179)	20,906	(0.00)	44,754	(87,488)	(20,906)	37,744	49,842	(9,410)	(104,071.06)	37,744	(63,639)
May-10	1,419.64	(7,763)	(8,207)	(8,748)	23,298	(0.00)	46,294	(74,918)	(23,298)	(14,179)	47,714	(7,763)	(91,873.86)	(14,179)	(51,923)
Jun-10	1,087.90	(6,411)	(6,215)	(11,551)	23,089	(0.00)	48,878	(71,708)	(23,089)	(60,098)	49,966	(6,411)	(89,474.46)	(60,098)	(45,920)
Jul-10	11,546.12	(5,050)	(2,034)	(1,205)	-	3,257.67	50,449	(17,329)	-	(26,979)	61,995	(5,050)	(20,568.17)	(23,721)	36,377
Aug-10	19,174.10	(4,249)	(2,306)	(2,565)	-	13,311.75	49,234	(16,882)	-	5,373	68,408	(4,249)	(21,752.92)	18,685	42,406
Sep-10	4,166.44	(2,538)	(2,313)	(2,845)	1,037	10,818.94	43,870	(17,725)	(1,037)	30,481	48,036	(2,538)	(22,883.50)	41,300	22,615
Oct-10	6,530.43	-	(2,049)	(2,469)	(922)	11,910.02	29,792	(19,819)	922	41,377	36,322	-	(24,336.18)	53,287	11,986
Nov-10	9,740.57	-	(3,270)	(2,349)	(2,201)	13,831.07	14,004	(22,202)	2,201	35,379	23,745	-	(27,821.21)	49,210	(4,077)
Dec-10	<b>40,699</b>	-	<b>(4,633)</b>	<b>(2,479)</b>	<b>(9,854)</b>	<b>37,565</b>	<b>(10,429)</b>	<b>(24,105)</b>	<b>9,854</b>	<b>10,698</b>	<b>30,270</b>	-	<b>(31,216)</b>	<b>48,263</b>	(947)
Jan-11	24,420	-	(4,696)	(2,957)	(24,696)	29,636	(19,115)	(31,189)	<b>24,696</b>	<b>(14,910)</b>	5,305	-	(38,842)	14,726	(33,537)
Feb-11	1,858	-	(676)	(2,573)	(36,667)	(8,422)	(17,713)	(24,902)	<b>36,667</b>	<b>(20,858)</b>	(15,855)	-	(28,152)	(29,280)	(44,006)
Mar-11	(32,235)	-	(3,362)	(2,807)	(7,558)	(54,384)	(38,574)	(27,624)	<b>7,558</b>	<b>(79,498)</b>	(70,809)	-	(33,793)	(133,882)	(104,602)
Apr-11	(75,704)	-	(3,199)	(2,366)	(8,730)	(144,384)	(45,860)	(22,505)	<b>8,730</b>	<b>(139,133)</b>	(121,564)	-	(28,071)	(283,517)	(149,635)
May-11	(26,027)	-	(3,218)	(2,464)	(7,575)	(183,668)	(36,872)	(21,268)	<b>7,575</b>	<b>(189,697)</b>	(62,899)	-	(26,950)	(373,365)	(89,848)
Jun-11	(3,145)	-	(2,944)	(2,886)	(5,025)	(197,667)	(47,094)	(18,783)	<b>5,025</b>	<b>(250,549)</b>	(50,239)	-	(24,612)	(448,216)	(74,851)
Jul-11	2,524	-	(2,913)	9,545	23,895	(164,615)	(49,590)	70,849	<b>(23,895)</b>	<b>(253,186)</b>	(47,066)	-	77,482	(417,801)	30,416
Aug-11	(3,341)	-	(3,325)	10,961	20,541	(139,779)	(36,728)	69,178	<b>(20,541)</b>	<b>(241,277)</b>	(40,069)	-	76,814	(381,056)	36,745
Sep-11	(10,580)	(1,766)	42,930	10,322	(9,029)	(107,902)	(43,527)	74,737	<b>9,029</b>	<b>(201,038)</b>	(54,107)	(1,766)	127,989	(308,940)	72,116

**Rate Schedule 32 - Secondary Sales Rebate to Rider F**

Date	RS 32 Rate	YEC		YEC Retail Sales	YEC Retail Rider F adjmt	RS 43 Rate	YEC		YECL POP Sales	YEC POP Rider F Adjmt	Total
		Retail Rate	Difference				Wholesale Rate	Difference			
31-Jan-10	0.064	0.072	-0.008	89,040	\$ (712.32)	0.053	0.061	-0.008	1,157,070	\$ (9,256.56)	\$ (9,968.88)
28-Feb-10	0.064	0.072	-0.008	86,160	\$ (689.28)	0.053	0.061	-0.008	1,257,060	\$ (10,056.48)	\$ (10,745.76)
31-Mar-10	0.064	0.072	-0.008	83,520	\$ (668.16)	0.053	0.061	-0.008	1,518,340	\$ (12,146.72)	\$ (12,814.88)
30-Apr-10	0.066	0.072	-0.006	74,640	\$ (447.84)	0.055	0.061	-0.006	1,493,730	\$ (8,962.38)	\$ (9,410.22)
31-May-10	0.066	0.072	-0.006	2,400	\$ (14.40)	0.055	0.061	-0.006	1,291,350	\$ (7,748.10)	\$ (7,762.50)
30-Jun-10	0.066	0.072	-0.006	-	\$ -	0.055	0.061	-0.006	1,068,510	\$ (6,411.06)	\$ (6,411.06)
31-Jul-10	0.067	0.072	-0.005	240	\$ (1.20)	0.056	0.061	-0.005	1,009,700	\$ (5,048.50)	\$ (5,049.70)
31-Aug-10	0.067	0.072	-0.005	-	\$ -	0.056	0.061	-0.005	849,880	\$ (4,249.40)	\$ (4,249.40)
30-Sep-10	0.067	0.072	-0.005	-	\$ -	0.056	0.061	-0.005	507,510	\$ (2,537.55)	\$ (2,537.55)
31-Oct-10	0.055	0.072	-0.017	-	\$ -	0.055	0.061	-0.006	-	\$ -	\$ -
30-Nov-10	0.055	0.072	-0.017	-	\$ -	0.055	0.061	-0.006	-	\$ -	\$ -
31-Dec-10	0.055	0.072	-0.017	-	\$ -	0.055	0.061	-0.006	-	\$ -	\$ -
<b>2010</b>				<b>336,000</b>	<b>\$ (2,533.20)</b>				<b>10,153,150</b>	<b>\$ (66,416.75)</b>	<b>\$ (68,949.95)</b>
31-Jan-11	0.064	0.072	-0.008	\$ -	-	0.061	0.061	-0.061	\$ -	\$ -	\$ -
28-Feb-11	0.064	0.072	-0.008	\$ -	-	0.061	0.061	-0.061	\$ -	\$ -	\$ -
31-Mar-11	0.064	0.072	-0.008	\$ -	-	0.061	0.061	-0.061	\$ -	\$ -	\$ -
30-Apr-11	0.076	0.072	0.004	\$ -	-	0.065	0.061	0.004	\$ -	\$ -	\$ -
31-May-11	0.076	0.072	0.004	\$ -	-	0.065	0.061	0.004	\$ -	\$ -	\$ -
30-Jun-11	0.076	0.072	0.004	\$ -	-	0.065	0.061	0.004	\$ -	\$ -	\$ -
31-Jul-11	0.084	0.072	0.012	\$ -	-	0.073	0.083	-0.00998	\$ -	\$ -	\$ -
31-Aug-11	0.084	0.072	0.012	\$ -	-	0.073	0.083	-0.00998	\$ -	\$ -	\$ -
30-Sep-11	0.084	0.072	0.012	\$ -	-	0.073	0.083	-0.00998	176,960	\$ (1,766.06)	\$ (1,766.06)
31-Oct-11	0.055	0.072	-0.017	\$ -	-	0.044	0.061	-0.017	\$ -	\$ -	\$ -
30-Nov-11	0.055	0.072	-0.017	\$ -	-	0.044	0.061	-0.017	\$ -	\$ -	\$ -
31-Dec-11	0.055	0.072	-0.017	\$ -	-	0.044	0.061	-0.017	\$ -	\$ -	\$ -
<b>2011</b>				<b>-</b>	<b>\$ -</b>				<b>176,960</b>	<b>\$ (1,766.06)</b>	<b>\$ (1,766.06)</b>
30-Sep-11	0.084	0.072	0.012	\$ -	-	0.073	0.08298	-0.00998	176,960	\$ (1,766.06)	\$ (1,766.06)

Rate determined by RS 32 Secondary Energy Retail is based on 66.67% of the cost of displaced fuel oil.  
Rate charged to YECL under RS 42 Wholesale Secondary is RS 32 rate less 1.1 cents/kWh  
GRA Rate approved by 209-8 is 4.1 cents/kWh for RS 42 - (which equals 5.2 cents/kWh for RS 32)  
Difference between rate received per Rate Schedules 42 and 4.1 cents per kWh (5.2 for RS 32) is refundable to or recoverable from Rider F

1 **REFERENCE:**

2  
3 **ISSUE/SUB-ISSUE: DFPVA**

4  
5 **QUOTE:**

6  
7 The DFPVA only addresses differences between actual fuel prices and GRA-approved  
8 fuel prices, and does not address any differences in actual and GRA-approved diesel  
9 generation. As noted on page 1 of the Policy in respect of the diesel fuel price variance,  
10 "For each actual litre of diesel consumed to generate electricity, the difference between  
11 the actual weighted average cost per litre of fuel consumed and the most recent GRA-  
12 approved fuel price is recorded in the DFPVA."  
13

14 **PREAMBLE:**

15  
16 The Board wishes to gain a better understanding of the mechanics of the DFPVA and  
17 volume risk faced by the Companies.  
18

19 **QUESTION:**

- 20  
21 a) Please explain why the difference between "the actual weighted average cost per  
22 liter of fuel consumed and the most recent GRA-approved fuel price" is used  
23 rather than the difference between "the actual cost per liter of fuel consumed and  
24 the most recent GRA-approved fuel price" when calculating the DFPVA balance?  
25  
26 b) Please explain why the utilities are proposing the use of actual diesel fuel  
27 consumed in the fuel adjustment clause calculations rather than the fuel  
28 consumption levels approved by the Board for recovery in rates.  
29  
30 c) Please provide a copy of any authority that directs the use of actual diesel fuel  
31 consumption in the calculation of the fuel adjustment clause.

1 d) YECL, using the spreadsheet provided in the answer to YUB-YEC/YECL-2-1 (f),  
2 in separate columns please provide the monthly:

- 3  
4 i. Calculations and explanations respecting the determination of the 2008,  
5 2009, 2010 and 2011 DFPVA balances; and  
6 ii. Calculation and corresponding explanations respecting the determination  
7 of the weighted average cost per liter of fuel that forms part of the DFPVA  
8 calculation.

9  
10 e) YEC, using the spreadsheet provided in the answer to YUB-YEC/YECL-2-1 (f), in  
11 separate columns please provide the monthly:

- 12  
13 i. Calculations and explanations respecting the determination of the 2008,  
14 2009, 2010 and 2011 DFPVA balances; and  
15 ii. Calculation and corresponding explanations respecting the determination  
16 of the weighted average cost per liter of fuel that forms part of the DFPVA  
17 calculation.

18  
19 f) Please explain how the DFPVA determinations in parts (d) and (e) above are  
20 appropriate for a price-only deferral account, i.e. volume risk is borne by the  
21 utility. Please explain the volume risk as understood by the Companies.

22  
23 g) For each of YEC and YECL, please provide a table showing variances in respect  
24 of fuel price for the period January to July 2011. For this period of time how were  
25 the volumes determined?

26  
27 h) How are non-test year volume variances determined? Please provide a copy of  
28 any authority that directs the determination of non test-year volume variances.

29  
30 **ANSWER:**

31  
32 **(a)**

33  
34 The difference between the most recent GRA approved fuel price and the actual  
35 weighted average cost per litre of fuel consumed is used when calculating the DFPVA

1 balance (as opposed to difference between the most recent GRA-approved fuel price  
2 and the actual cost per litre of fuel consumed) due to inventory management  
3 considerations. The cost of fuel related to the DFPVA balance is calculated when the  
4 fuel is actually consumed (not when the fuel is purchased). Consequently, it is not  
5 possible to distinguish one litre of fuel in inventory purchased at a certain price from  
6 another litre of fuel in inventory purchased at another price and a weighted average cost  
7 of all fuel in inventory must be used.

8  
9 **(b) and (c)**

10  
11 Section 8 of Rate Policy Directive Order in Council (OIC) 1995/90 provides for fuel price  
12 adjustments and sets out that the Board must permit Yukon Energy and Yukon Electrical  
13 (the “Companies”) to adjust their rates to retail customers, major industrial customers,  
14 and isolated industrial customers to reflect fluctuations in the prices for diesel fuel,  
15 without the requirement for specific application to and approval of the Board. This basic  
16 OIC rate policy direction has been in place since OIC 1988/150 and the policy of the  
17 Companies to administer Rider F reflects the general practice since 1988 (as regards  
18 diesel fuel prices) and since 2005 (as regards secondary sales rates).

19  
20 Material outlining the calculation of Rider F (and related DFPVA balances) has routinely  
21 been filed with the Board over the past two decades according to the current policy and  
22 practice. These filings have illustrated that the actual diesel fuel consumed (as opposed  
23 to fuel consumption levels approved at the last GRA) have been used in the calculation  
24 of the DFPVA balance and subsequent Rider F adjustments. For authorities regarding  
25 use of actual diesel fuel consumption in calculations see response to YUB-YEC/YECL-2-  
26 1(h) and (i). The methodology for calculating deferrals to the DFPVA was reviewed in the  
27 1989/90 GRA (in response to BD-22 provided as an attachment to that response) and  
28 Rider F was approved as filed in the Board Orders indicated in that response.

29  
30 As noted in response to LE-YEC/YECL-1-2 as well as LE-YEC/YEC-1-7 REVISED and  
31 YUB-YEC/YECL-2-1(l), a fuel price adjustment rider (as provided for in OIC 1995/90)  
32 would be ineffective if it applied only to GRA forecast fuel. Specifically, LE-YEC/YECL-1-  
33 2 noted that “to ensure fuel price risk is fully addressed by the fuel price variance  
34 mechanism in Yukon (and in all other jurisdictions where fuel price risk is handled  
35 outside of the setting of the normal regulated rate) it must apply to all volumes of fuel

1 consumed. It would be ineffective if it applied only to the forecast fuel”. The Companies  
2 are not aware of any jurisdiction that provides a fuel price adjustment mechanism that  
3 only addresses fuel price variances for utility board approved fuel volumes<sup>1</sup>.

4  
5 **(d)**

6  
7 **(i)**

8  
9 Please refer to YUB-YEC/YECL-2-3 (d) (i) Attachment 1.

10  
11 The fuel variance is calculated by taking the actual generation kWhs for each community  
12 and dividing by the GRA forecast heat rates in kWhs / Litre (ie: production efficiency  
13 rate). This will yield an amount of litres.

14  
15 The weighted average fuel price is then compared to the GRA forecasted fuel price. The  
16 difference is then multiplied by the litres as per the above. This will yield the fuel  
17 variance dollars to be refunded or collected from customers.

18  
19 In summary:

20  
21 Actual Generation (kWh)

22 -----

23 Heat Rate (kWh per Litres)

24  
25 = Litres for variance purposes (L)

26  
27 L \* (Actual weighted average price per litre - GRA forecast price per litre)

28  
29 = Fuel Variance \$\$

---

<sup>1</sup> LE-YEC/YECL-1-2 noted “to the best of the Companies’ understanding other Canadian regulated electrical utilities where, similar to the Yukon, fuel price risk is handled outside of the normal approved regulated rates thereby permitting the utilities to collect from (or credit to) ratepayers related costs of fuel in excess of (or lesser than) diesel costs that are incorporated in their utility board approved rates include Northwest Territories Power Corporation, Northlands Utilities Limited (NWT), Qulliq Energy Corporation (Nunavut), Newfoundland and Labrador Power Corporation, and Nova Scotia Power”.

1 Please note that the old 1996/97 GRA forecast parameters were in place for 2008 and  
2 up to May of 2009 for the fuel variance calculation per Attachment 1. The parameter  
3 updates and fuel variance amounts were trued up to those approved as part of the 2008  
4 and 2009 revenue requirement, as part of the **April 6, 2009 YECL GRA Compliance**  
5 **filing which updated rates as of June 1, 2009.** This was approved per Board Order  
6 2009-5. The 2008 and Jan-Mar 2009 fuel variance per Attachment 1 can be found in the  
7 April 6, 2009 YECL 2008/2009 Compliance filing, revised Schedule 11.3 on line 14 and  
8 16-18, along with the recalculated fuel variances per the 2008/2009 parameters. The  
9 difference was netted into the rate increases taking effect as of June 1, 2009.

10  
11 As well, it has come to the attention of YECL during this proceeding that standby units  
12 were not incorporated into the Fuel Variance calculations when updated for prospective  
13 use as of June 1, 2009. Standby units were included in the 2008/2009 revenue  
14 requirement and were outlined as part of the YECL GRA Compliance filing within  
15 Schedules 4.1 and 4.2. Thus, the standby units should be included as part of the diesel  
16 fuel price variance account (DFPVA). As such YECL has calculated the Attachment 1  
17 schedules with the standby units included. The difference in the DFPVA is as follows in  
18 Table 1:

19  
20 **Table 1:**  
21 **Standby Unit Analysis – DFPVA Difference (with versus without)**  
22 **(Collect from) Refund to Customers**

Period	(\$000s)		
	As Filed Without Standbys	Revised With Standbys	DFPVA Difference
Jun-Dec 2009	(556)	(558)	(2)
Jan-Dec 2010	489	482	(7)
Jan-Sep 2011	(335)	(339)	(4)
<b>Net amount to (collect from) / Refund to customers</b>			<b>(13)</b>

23  
24  
25 YECL will not consider collecting the net amount owed from June 1, 2009 but will begin  
26 to include the standby units in the DFPVA prospectively beginning October 2011.

1 (ii)

2  
3 The weighted average cost per litre is determined by taking the total cost of fuel  
4 purchases divided by the litres on hand. The values used for any given month are  
5 tracked on a first-in first-out basis such that the cost calculated for a given month and  
6 community are the costs on average of the litres on hand.

7  
8 Please see YUB-YEC-YECL-2-3 (d) (ii) Attachment 1 for an example of the calculation of  
9 the average price for Watson Lake for January 2011. This is also outlined in the Table 2  
10 below:

**Table 2:**  
**Yukon Electrical Company Limited**  
**Actual Weighted Average Fuel Calculation**

Yukon Electrical Company Limited  
Actual Weighted Average Fuel Calculation  
Watson Lake  
January 2011

JANUARY		TRANSACTION			INVENTORY			
DATE	INVOICE	LITRES	DOLLARS		PRICE	LITRES	DOLLARS	PRICE
			Estimate	Actual				
	Beginning Inventory	123,554		\$108,926.76	0.8816	123,554	\$108,926.76	0.8816
101222	n/a	-48,000	(\$43,608.90)		0.9085	171,554	\$152,535.67	0.8891
101222	923781659	48,000		\$43,608.91	0.9085	123,554	\$108,926.77	0.8816
101228	n/a	-48,000	(\$43,752.00)		0.9115	75,554	\$65,174.77	0.8626
101228	923782091	48,000		\$43,752.00	0.9115	123,554	\$108,926.77	0.8816
101230	n/a	-45,601	(\$41,063.61)		0.9005	77,953	\$67,863.16	0.8706
101230	923781692-A	45,601		\$41,063.70	0.9005	123,554	\$108,926.86	0.8816
110103	923840050	25,815		\$22,988.26	0.8905	149,369	\$131,915.12	0.8831
110104	923841531	20,000		\$17,810.00	0.8905	169,369	\$149,725.12	0.8840
110107	923862564	46,000		\$40,319.88	0.8765	215,369	\$190,045.00	0.8824
110111	923920400	46,000		\$41,055.00	0.8925	261,369	\$231,100.00	0.8842
110113	923930923	45,001		\$40,073.39	0.8905	306,370	\$271,173.39	0.8851
110117	923943721	46,000		\$41,147.00	0.8945	352,370	\$312,320.39	0.8863
110120	923962765	45,509		\$40,980.85	0.9005	397,879	\$353,301.24	0.8880
110124	923973633	49,243		\$43,900.13	0.8915	447,122	\$397,201.37	0.8884
110127	n/a	43,999			0.8865	491,121	\$436,206.48	0.8882
		491,121	\$39,005.11	\$327,279.72		491,121	\$436,206.48	0.8882 (1)

14 (1) Actual Weighted Average Fuel Cost for January 2011

15  
16 (e) and (f) for YEC

17  
18 Please see Attachment 1 to this response for the YEC excel spreadsheet with the  
19 following:

- 1 • Attachment 1 provides calculations and explanations respecting the  
2 determination of the 2008, 2009, 2010 and 2011 DFPVA balances. This excel  
3 sheet includes a DFPV Orientation worksheet which provides explanation as to  
4 the data fields and calculations used to determine the monthly diesel fuel price  
5 variance; and  
6
- 7 • The Attachment 1 excel sheet also provides in final Tab a sample calculation  
8 (illustrated in Table 3 below) and corresponding explanations respecting the  
9 determination of the weighted average cost per liter of fuel for Whitehorse that  
10 forms part of the 2010 DFPVA calculation. This attachment illustrates how the  
11 weighted average cost per litre of fuel for Whitehorse was determined and  
12 corresponds to the Actual Cents per Litre in Row 34 of the YEC DFPV – 2010 tab  
13 in Attachment 1.

**Table 3:  
Weighted Average Cost of Fuel Calculation**

Weighted Average Cost of Fuel Calculation

Whitehorse - 2010-2011

Month	Opening		Purchases		Weighted Cost/L			Consumed		Closing inventory	
	L	\$	L	\$	L	\$	\$/L	L	\$	L	\$
Dec-10	147,157	\$ 122,576	-	\$ -	147,157	\$ 122,576	<b>0.8330</b>		\$ -	147,157	\$ 122,576
Jan-11	147,157	\$ 122,576	36,547	\$ 30,163	183,705	\$ 152,739	<b>0.8314</b>	37,186	\$ 30,918	146,518	\$ 121,821
Feb-11	146,518	\$ 121,821	-	\$ -	146,518	\$ 121,821	<b>0.8314</b>	11,281	\$ 9,379	135,238	\$ 112,441
Mar-11	135,238	\$ 112,441	-	\$ -	135,238	\$ 112,441	<b>0.8314</b>	-	\$ -	135,238	\$ 112,441
Apr-11	135,238	\$ 112,441	-	\$ -	135,238	\$ 112,441	<b>0.8314</b>	-	\$ -	135,238	\$ 112,441
May-11	135,238	\$ 112,441	-	\$ -	135,238	\$ 112,441	<b>0.8314</b>	6,598	\$ 5,485	128,640	\$ 106,956
Jun-11	128,640	\$ 106,956	-	\$ -	128,640	\$ 106,956	<b>0.8314</b>	4,548	\$ 3,781	124,092	\$ 103,175
Jul-11	124,092	\$ 103,175	81,186	\$ 68,302	205,278	\$ 171,476	<b>0.8353</b>	66,162	\$ 55,268	139,116	\$ 116,209
Aug-11	139,116	\$ 116,209	55,049	\$ 45,983	194,165	\$ 162,191	<b>0.8353</b>	61,618	\$ 51,471	132,547	\$ 110,720
Sep-11	132,547	\$ 110,720	-	\$ -	132,547	\$ 110,720	<b>0.8353</b>	10,231	\$ 8,546	122,316	\$ 102,174
Oct-11	122,316	\$ 102,174	-	\$ -	122,316	\$ 102,174	<b>0.8353</b>	38,548	\$ 32,200	83,768	\$ 69,974
Nov-11	83,768	\$ 69,974	55,407	\$ 51,656	139,175	\$ 121,629	<b>0.8739</b>	11,072	\$ 9,676	128,102	\$ 111,953
Dec-11	128,102	\$ 111,953	432,509	\$ 388,840	560,611	\$ 500,793	<b>0.8933</b>	413,353	\$ 369,248	147,258	\$ 131,546

19 For discussion of volume risk vs. price risk please see also response to YUB-  
20 YEC/YECL-2-1. The Companies are at risk for diesel generation cost increases due to  
21 increased volume of diesel generation compared to GRA -forecast diesel generation at  
22 GRA approved fuel price. In this respect, the Companies are at risk for increased costs  
23 due to increased amounts of generation compared to what was forecast, i.e., due to  
24 higher than anticipated load, colder weather or unexpected maintenance or outages. It is  
25 generally expected that the utilities are responsible for and account for these risks within  
26 their GRA load forecasts (and accordingly are subject to volume risk if load forecasts are

1 higher than expected or benefit if forecasts are lower than expected). These impacts are  
2 partially mitigated by the offsetting impacts on utility revenues from these variances).  
3 By contrast, fuel price risks arise from external market conditions that are not within the  
4 utilities' control or ability to forecast. Historically, the policy in Yukon has been that the  
5 utilities are not responsible for specific risks related to diesel fuel price variance.

6

7 **(g)**

8

9 Please see response to YUB-YEC/YECL-2-3(e) and (f) above. The attached tables show  
10 variances in respect of fuel price for 2011 (please refer to YEC DFPV- 2011).

11

12 The volumes for the DFPV calculation are determined by dividing actual generation by  
13 GRA forecast efficiency rates.

14

15 **(h)**

16

17 Please see YUB-YEC/YECL-2-2(e) Attachment 1. The actual volumes of fuel consumed  
18 are used in the DFPVA calculation. No variance in volume is calculated. For authorities  
19 regarding the DFPVA calculations for any year (including no test years) please see  
20 response to YUB-YEC/YECL-2-1(h) and (i).

Yukon Electrical Company Limited  
Diesel Price Variance Calculations  
2008

	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 08	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08	Total 2008
<b>Actual Generation (Kwh)</b>													
Haines Junction (Standby)	-	139	925	-	-	2,648	-	734	28,919	3,702	4,017	-	41,084
Watson Lake	1,368,000	1,506,000	1,225,200	1,099,200	1,017,600	1,012,800	964,800	993,600	1,036,800	1,089,600	1,228,800	1,603,200	14,145,600
Beaver Creek	134,379	174,994	139,527	146,558	140,917	173,521	171,989	198,326	127,529	119,054	161,067	168,484	1,856,345
Destruction Bay	128,340	186,780	153,840	169,800	140,280	131,340	133,440	127,500	135,420	184,380	111,580	165,240	1,767,940
Old Crow	124,200	168,700	207,500	122,800	138,100	130,500	136,000	128,200	136,300	147,900	178,000	201,600	1,819,800
Stewart Crossing (Standby)	-	3,000	-	720	-	-	-	-	-	3,000	-	-	6,720
Pelly Crossing	202,000	267,490	263,660	185,930	217,960	132,000	153,480	112,426	202,890	240,360	215,340	9,030	2,202,566
Swift River	36,328	28,432	24,082	24,820	21,516	15,445	16,974	19,882	13,017	19,733	22,682	29,517	272,428
Other (Standby)	-	2,932	904	-	21,880	-	10,692	-	3,010	9,475	2,000	60,075	110,968
<b>Total</b>	<b>1,993,247</b>	<b>2,338,467</b>	<b>2,015,638</b>	<b>1,749,828</b>	<b>1,698,253</b>	<b>1,598,254</b>	<b>1,587,375</b>	<b>1,580,668</b>	<b>1,683,885</b>	<b>1,817,204</b>	<b>1,923,486</b>	<b>2,237,146</b>	<b>22,223,451</b>
<b>GRA Forecast Heat Rates (Kwh / Litre)</b>													
Haines Junction (Standby)	-	-	-	-	-	-	-	-	-	-	-	-	-
Watson Lake	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80	3.80
Beaver Creek	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
Destruction Bay	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
Old Crow	3.49	3.49	3.49	3.49	3.49	3.49	3.49	3.49	3.49	3.49	3.49	3.49	3.49
Stewart Crossing (Standby)	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63
Pelly Crossing	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
Swift River	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Other (Standby)	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Litres @ GRA Approved Heat Rates</b>													
Haines Junction (Standby)	-	-	-	-	-	-	-	-	-	-	-	-	-
Watson Lake	360,000	396,316	322,421	289,263	267,789	266,526	253,895	261,474	272,842	286,737	323,368	421,895	3,722,526
Beaver Creek	38,394	49,998	39,865	41,874	40,262	49,577	49,140	56,665	36,437	34,015	46,019	48,138	530,384
Destruction Bay	36,669	53,366	43,954	48,514	40,080	37,526	38,126	36,429	38,691	52,680	31,880	47,211	505,126
Old Crow	35,587	48,338	59,456	35,186	39,570	37,393	38,968	36,734	39,054	42,378	51,003	57,765	521,433
Stewart Crossing (Standby)	-	1,840	-	442	-	-	-	-	-	1,840	-	-	4,123
Pelly Crossing	57,714	76,426	75,331	53,123	62,274	37,714	43,851	32,122	57,969	68,674	61,526	2,580	629,305
Swift River	12,109	9,477	8,027	8,273	7,172	5,148	5,658	6,627	4,339	6,578	7,561	9,839	90,809
Other (Standby)	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>540,474</b>	<b>635,761</b>	<b>549,055</b>	<b>476,675</b>	<b>457,148</b>	<b>433,885</b>	<b>429,638</b>	<b>430,049</b>	<b>449,332</b>	<b>492,903</b>	<b>521,357</b>	<b>587,428</b>	<b>6,003,706</b>
<b>Actual Weighted Average Fuel Price (Cents/Litre)</b>													
Haines Junction (Standby)	0.0000	0.8727	0.8727	0.0000	0.0000	0.8727	0.0000	0.8727	0.4214	1.2074	1.2074	0.0000	-
Watson Lake	0.8698	0.8734	0.9814	1.0420	1.1030	1.1569	1.1831	1.1162	1.0823	1.0409	0.9222	0.7509	-
Beaver Creek	0.8685	0.8415	0.8960	0.9694	1.0030	1.0894	1.1371	1.1241	1.1027	1.0877	1.0592	0.9190	-
Destruction Bay	0.8899	0.8583	0.9194	0.9940	1.0273	1.1141	1.1621	1.1619	1.1185	1.0943	1.0585	0.8958	-
Old Crow	1.8329	1.8329	1.8329	2.0586	2.0116	2.1469	2.1464	2.1494	2.1324	2.1325	2.1198	1.8169	-
Stewart Crossing (Standby)	0.0000	0.7192	0.0000	0.7190	0.0000	0.0000	0.0000	0.0000	0.0000	0.7192	0.0000	0.0000	-
Pelly Crossing	0.9314	0.9142	0.9766	1.0062	1.1045	1.2176	1.1940	1.1694	1.1272	1.1384	1.0776	1.0108	-
Swift River	0.9355	0.9274	0.9275	1.0894	1.0656	1.1754	1.2597	1.2182	1.1327	1.1219	1.1295	0.9433	-
Other (Standby)	0.0000	0.3301	0.7639	0.0000	0.7267	0.0000	0.6793	0.0000	0.3301	0.6577	0.7682	0.6385	-
<b>GRA Forecast Fuel Price (Cents/Litre)</b>													
Haines Junction (Standby)	-	-	-	-	-	-	-	-	-	-	-	-	-
Watson Lake	0.2843	0.2843	0.2843	0.2843	0.2843	0.2843	0.2843	0.2843	0.2843	0.2843	0.2843	0.2843	0.2843
Beaver Creek	0.3381	0.3381	0.3381	0.3381	0.3381	0.3381	0.3381	0.3381	0.3381	0.3381	0.3381	0.3381	0.3381
Destruction Bay	0.3260	0.3260	0.3260	0.3260	0.3260	0.3260	0.3260	0.3260	0.3260	0.3260	0.3260	0.3260	0.3260
Old Crow	0.7702	0.7702	0.7702	0.7702	0.7702	0.7702	0.7702	0.7702	0.7702	0.7702	0.7702	0.7702	0.7702
Stewart Crossing (Standby)	0.3290	0.3290	0.3290	0.3290	0.3290	0.3290	0.3290	0.3290	0.3290	0.3290	0.3290	0.3290	0.3290
Pelly Crossing	0.3287	0.3287	0.3287	0.3287	0.3287	0.3287	0.3287	0.3287	0.3287	0.3287	0.3287	0.3287	0.3287
Swift River	0.3152	0.3152	0.3152	0.3152	0.3152	0.3152	0.3152	0.3152	0.3152	0.3152	0.3152	0.3152	0.3152
Other (Standby)	0.3954	0.3954	0.3954	0.3954	0.3954	0.3954	0.3954	0.3954	0.3954	0.3954	0.3954	0.3954	0.3954
<b>Fuel Variance Dollars</b>													
Haines Junction (Standby)	-	-	-	-	-	-	-	-	-	-	-	-	-
Watson Lake	(210,749)	(233,467)	(224,737)	(219,175)	(219,238)	(232,571)	(228,197)	(217,506)	(217,720)	(216,937)	(206,254)	(196,844)	(2,623,398)
Beaver Creek	(20,362)	(25,169)	(22,241)	(26,435)	(26,770)	(37,249)	(39,260)	(44,539)	(27,860)	(25,498)	(33,185)	(27,961)	(356,529)
Destruction Bay	(20,680)	(28,408)	(26,085)	(32,411)	(28,107)	(29,575)	(31,878)	(30,451)	(30,664)	(40,476)	(23,353)	(26,901)	(348,988)
Old Crow	(37,820)	(51,371)	(63,185)	(45,335)	(49,123)	(51,478)	(53,628)	(50,661)	(53,199)	(57,733)	(68,833)	(60,464)	(642,829)
Stewart Crossing (Standby)	-	(718)	-	(172)	-	-	-	-	-	(718)	-	-	(1,609)
Pelly Crossing	(34,789)	(44,753)	(48,808)	(35,992)	(48,315)	(33,528)	(37,947)	(27,007)	(46,290)	(55,611)	(46,080)	(1,760)	(460,880)
Swift River	(7,511)	(5,802)	(4,915)	(6,405)	(5,382)	(4,429)	(5,344)	(5,984)	(3,547)	(5,306)	(6,157)	(6,180)	(66,961)
Other (Standby)	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>(331,911)</b>	<b>(389,688)</b>	<b>(389,971)</b>	<b>(365,925)</b>	<b>(376,936)</b>	<b>(388,829)</b>	<b>(396,255)</b>	<b>(376,147)</b>	<b>(379,280)</b>	<b>(402,279)</b>	<b>(383,862)</b>	<b>(320,111)</b>	<b>(4,501,195)</b>

Yukon Electrical Company Limited  
Diesel Price Variance Calculations  
2009

	Jan 09	Feb 09	Mar 09	Apr 09	May 09	Jun 09 <sup>(1)</sup>	Jul 09	Aug 09	Sep 09	Oct 09	Nov 09	Dec 09	Total 2009
<b>Actual Generation (Kwh)</b>													
Haines Junction (Standby)	7,135	-	-	-	-	-	-	4,271	-	231	1,767	1,203	14,607
Watson Lake	1,376,400	1,243,200	1,441,200	918,000	964,800	993,600	931,200	1,032,000	974,000	1,190,400	1,339,200	1,536,000	13,940,000
Beaver Creek	176,330	182,822	125,896	144,828	134,227	172,324	152,309	176,572	148,811	146,883	141,940	170,632	1,873,574
Destruction Bay	194,331	152,833	193,784	152,848	125,902	119,203	120,192	123,280	123,400	128,604	159,104	177,112	1,770,593
Old Crow	220,130	153,470	172,000	171,600	144,400	141,600	118,740	129,660	147,400	167,880	132,390	204,700	1,903,970
Stewart Crossing (Standby)	-	-	-	-	-	-	-	60	-	-	-	-	60
Pelly Crossing	14,070	2,650	-	2,420	-	2,320	940	37,860	-	33,270	760	280	94,570
Swift River	32,147	26,284	31,789	24,709	18,764	17,796	17,666	17,606	16,900	18,101	23,000	20,166	264,928
Other (Standby)	35,710	1,135	-	8,899	1,146	1,063	13,097	18,445	-	17,400	5,748	1,496	104,139
<b>Total</b>	<b>2,056,253</b>	<b>1,762,394</b>	<b>1,964,669</b>	<b>1,423,304</b>	<b>1,389,239</b>	<b>1,447,906</b>	<b>1,354,144</b>	<b>1,539,754</b>	<b>1,410,511</b>	<b>1,702,769</b>	<b>1,803,909</b>	<b>2,111,589</b>	<b>19,966,441</b>
<b>GRA Forecast Heat Rates (Kwh / Litre)<sup>(1)</sup></b>													
Haines Junction (Standby)	-	-	-	-	-	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
Watson Lake	3.80	3.80	3.80	3.80	3.80	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82
Beaver Creek	3.50	3.50	3.50	3.50	3.50	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56
Destruction Bay	3.50	3.50	3.50	3.50	3.50	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41
Old Crow	3.49	3.49	3.49	3.49	3.49	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56
Stewart Crossing (Standby)	-	-	-	-	-	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
Pelly Crossing	3.50	3.50	3.50	3.50	3.50	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Swift River	3.00	3.00	3.00	3.00	3.00	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99
Other (Standby)	-	-	-	-	-	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
<b>Total</b>													
<b>Litres @ GRA Approved Heat Rates</b>													
Haines Junction (Standby)	-	-	-	-	-	-	-	1,220	-	66	505	344	2,135
Watson Lake	362,211	327,158	379,263	241,579	253,895	260,105	243,770	270,157	254,974	311,623	350,576	402,094	3,657,404
Beaver Creek	50,380	52,235	35,970	41,379	38,351	48,406	42,783	49,599	41,801	41,259	39,871	47,930	529,964
Destruction Bay	55,523	43,667	55,367	43,671	35,972	34,957	35,247	36,152	36,188	37,714	46,658	51,939	513,054
Old Crow	63,074	43,974	49,284	49,169	41,375	39,775	33,354	36,421	41,404	47,157	37,188	57,500	539,677
Stewart Crossing (Standby)	-	-	-	-	-	-	-	17	-	-	-	-	17
Pelly Crossing	4,020	757	-	691	-	641	260	10,459	-	9,191	210	77	26,306
Swift River	10,716	8,761	10,596	8,236	6,255	5,952	5,908	5,888	5,652	6,054	7,692	6,744	88,456
Other (Standby)	-	-	-	-	-	304	3,742	5,270	-	4,971	1,642	427	16,357
<b>Total</b>	<b>545,924</b>	<b>476,552.01</b>	<b>530,480.30</b>	<b>384,726.05</b>	<b>375,847.33</b>	<b>390,138.94</b>	<b>365,063.94</b>	<b>415,184.07</b>	<b>380,019.02</b>	<b>458,035.28</b>	<b>484,342.36</b>	<b>567,056.55</b>	<b>5,373,370</b>
<b>Actual Weighted Average Fuel Price (Cents/Litre)</b>													
Haines Junction (Standby)	1.2074	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.2074	0.0000	1.2074	1.2074	1.2074	1.2074
Watson Lake	0.7200	0.6504	0.6042	0.6080	0.6053	0.6563	0.6635	0.6909	0.6807	0.7098	0.7376	0.7346	0.7346
Beaver Creek	0.8666	0.8720	0.7802	0.7728	0.7381	0.7646	0.7923	0.8239	0.8322	0.8287	0.8865	0.8808	0.8808
Destruction Bay	0.8456	0.8664	0.7781	0.7531	0.7143	0.7655	0.7759	0.7987	0.8238	0.8088	0.8764	0.8722	0.8722
Old Crow	1.8259	1.8259	1.5008	1.5478	1.5424	1.4952	1.6392	1.6392	1.6190	1.6403	1.6403	1.7078	1.7078
Stewart Crossing (Standby)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.7190	0.0000	0.0000	0.0000	0.0000	0.0000
Pelly Crossing	1.0180	1.1032	0.0000	1.0498	0.0000	1.0490	0.9918	0.8830	0.0000	0.8718	0.8718	0.8719	0.8719
Swift River	0.8524	0.8524	0.7314	0.7253	0.6637	0.6676	0.6682	0.6868	0.6868	0.7267	0.7267	0.7757	0.7757
Other (Standby)	0.8233	0.7923	0.6740	0.7267	0.6856	0.7923	0.7804	0.7794	0.0000	0.7916	0.8066	0.7767	0.7767
<b>GRA Forecast Fuel Price (Cents/Litre)<sup>(1)</sup></b>													
Haines Junction (Standby)	-	-	-	-	-	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000
Watson Lake	0.2843	0.2843	0.2843	0.2843	0.2843	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748
Beaver Creek	0.3381	0.3381	0.3381	0.3381	0.3381	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152
Destruction Bay	0.3260	0.3260	0.3260	0.3260	0.3260	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313
Old Crow	0.7702	0.7702	0.7702	0.7702	0.7702	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341
Stewart Crossing (Standby)	0.3290	0.3290	0.3290	0.3290	0.3290	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000
Pelly Crossing	0.3287	0.3287	0.3287	0.3287	0.3287	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933
Swift River	0.3152	0.3152	0.3152	0.3152	0.3152	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244
Other (Standby)	-	-	-	-	-	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000
<b>Fuel Variance Dollars</b>													
Haines Junction (Standby)	-	-	-	-	-	-	-	(619)	-	(33)	(256)	(174)	(1,083)
Watson Lake	(157,784)	(119,769)	(121,293)	(78,181)	(81,500)	56,843	51,514	49,676	49,496	51,410	48,084	56,379	(195,125)
Beaver Creek	(26,626)	(27,887)	(15,901)	(17,988)	(15,339)	2,451	982	(432)	(710)	(556)	(2,843)	(3,146)	(107,994)
Destruction Bay	(28,852)	(23,599)	(25,034)	(18,653)	(13,970)	2,299	1,952	1,178	272	850	(2,105)	(2,125)	(107,787)
Old Crow	(66,584)	(46,421)	(36,007)	(38,235)	(31,949)	17,456	9,835	10,740	13,047	13,856	10,927	13,012	(130,324)
Stewart Crossing (Standby)	-	-	-	-	-	-	-	(0)	-	-	-	-	(0)
Pelly Crossing	(2,771)	(586)	-	(499)	-	(100)	(26)	108	-	197	5	2	(3,670)
Swift River	(5,756)	(4,706)	(4,410)	(3,378)	(2,179)	1,529	1,514	1,399	1,343	1,197	1,521	1,003	(10,924)
Other (Standby)	-	-	-	-	-	(28)	(301)	(419)	-	(455)	(175)	(33)	(1,411)
<b>Total</b>	<b>(288,374)</b>	<b>(222,968)</b>	<b>(202,644)</b>	<b>(156,933)</b>	<b>(144,937)</b>	<b>80,450</b>	<b>65,470</b>	<b>61,632</b>	<b>63,447</b>	<b>66,464</b>	<b>55,156</b>	<b>64,918</b>	<b>(558,319)</b>

**Note 1:**  
The Diesel Price Variance Calculations were based on historical GRA data up to May of 2009. A true-up from Jan 2008 to May 2009 period was included as part of the 2008/2009 GRA Compliance Filing. New rates were implemented effective June 1, 2009.  
October 28, 2009

Yukon Electrical Company Limited  
Diesel Price Variance Calculations  
2010

	Jan 10	Feb 10	Mar 10	Apr 10	May 10	Jun 10	Jul 10	Aug 10	Sep 10	Oct 10	Nov 10	Dec 10	Total 2010
<b>Actual Generation (Kwh)</b>													
Haines Junction (Standby)		849	-	-	-	-	-	4,844	-	1,191	25,166	-	32,050
Watson Lake	1,435,200	1,387,200	1,200,000	1,056,000	998,400	960,000	912,000	988,800	1,008,000	1,108,800	1,411,200	1,526,400	13,992,000
Beaver Creek	178,328	179,465	140,313	139,553	142,595	166,673	169,198	183,533	156,857	142,503	161,342	156,432	1,916,792
Destruction Bay	186,563	169,800	145,277	145,448	132,463	122,017	123,977	121,359	130,301	141,905	167,049	179,880	1,766,039
Old Crow	197,600	207,600	136,320	163,300	131,400	121,900	128,500	133,200	142,500	162,000	161,600	217,500	1,903,420
Stewart Crossing (Standby)	-	900	-	-	-	300	-	-	-	-	-	-	1,200
Pelly Crossing	-	-	460	-	-	-	-	550	-	21,770	-	-	22,780
Swift River	24,096	19,110	18,017	15,016	14,758	10,836	9,112	10,675	11,843	13,657	17,714	24,094	188,928
Other (Standby)	1,630	1,302	735	3,486	759	774	2,620	1,557	-	2,159	1,089	342	16,453
<b>Total</b>	<b>2,024,266</b>	<b>1,965,377</b>	<b>1,641,122</b>	<b>1,522,803</b>	<b>1,420,375</b>	<b>1,382,500</b>	<b>1,345,407</b>	<b>1,444,518</b>	<b>1,449,501</b>	<b>1,593,985</b>	<b>1,945,160</b>	<b>2,104,648</b>	<b>19,839,662</b>
<b>GRA Forecast Heat Rates (Kwh / Litre)</b>													
Haines Junction (Standby)	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
Watson Lake	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82
Beaver Creek	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56
Destruction Bay	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41
Old Crow	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56
Stewart Crossing (Standby)	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
Pelly Crossing	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62
Swift River	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99
Other (Standby)	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
<b>Total</b>													
<b>Litres @ GRA Approved Heat Rates</b>													
Haines Junction (Standby)	243	-	-	-	-	-	-	1,384	-	340	7,190	-	-
Watson Lake	375,707	363,141	314,136	276,440	261,361	251,309	238,743	258,848	263,874	290,262	369,424	399,581	-
Beaver Creek	50,092	50,412	39,414	39,200	40,055	46,818	47,528	51,554	44,061	40,029	45,321	43,942	-
Destruction Bay	54,711	49,795	42,603	42,653	38,845	35,782	36,357	35,589	38,211	41,614	48,988	52,751	-
Old Crow	55,506	58,315	38,292	45,871	36,910	34,242	36,096	37,416	40,028	45,506	45,393	61,096	-
Stewart Crossing (Standby)	-	257	-	-	-	86	-	-	-	-	-	-	-
Pelly Crossing	-	-	127	-	-	-	-	152	-	6,014	-	-	-
Swift River	8,059	6,391	6,026	5,022	4,936	3,624	3,047	3,570	3,961	4,568	5,924	8,058	-
Other (Standby)	466	372	210	996	217	221	749	445	-	617	311	98	-
<b>Total</b>	<b>544,782.26</b>	<b>528,682.65</b>	<b>440,808.07</b>	<b>410,182.30</b>	<b>382,324.24</b>	<b>372,081.78</b>	<b>362,519.44</b>	<b>388,958.29</b>	<b>390,135.70</b>	<b>428,949.21</b>	<b>522,551.95</b>	<b>565,524.87</b>	
<b>Actual Weighted Average Fuel Price (Cents/Litre)</b>													
Haines Junction (Standby)	1.2076	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.2075	0.0000	1.2076	1.0010	0.0000	
Watson Lake	0.7522	0.7175	0.7281	0.7458	0.7253	0.7130	0.6997	0.7141	0.7391	0.7906	0.8322	0.8784	
Beaver Creek	0.8985	0.8719	0.8698	0.8615	0.8608	0.8281	0.8188	0.8369	0.8473	0.8689	0.9607	1.0180	
Destruction Bay	0.8915	0.8662	0.8707	0.8555	0.8524	0.8318	0.8251	0.8349	0.8339	0.9040	0.9468	1.0031	
Old Crow	1.7109	1.7109	1.6948	1.6972	1.6965	1.6982	1.7187	1.7187	1.7166	1.7166	1.7166	1.7916	
Stewart Crossing (Standby)	0.0000	0.7192	0.0000	0.0000	0.0000	0.7191	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Pelly Crossing	0.0000	0.0000	0.8719	0.0000	0.0000	0.0000	0.0000	0.7557	0.0000	0.7557	0.0000	0.0000	
Swift River	0.7775	0.7775	0.7911	0.7911	0.7764	0.7764	0.7774	0.7910	0.7910	0.7910	0.8706	0.9224	
Other (Standby)	0.7207	0.7505	0.7791	0.8297	0.7141	0.7626	0.8078	0.8282	0.0000	0.6856	0.7792	0.7792	
<b>GRA Forecast Fuel Price (Cents/Litre)</b>													
Haines Junction (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000
Watson Lake	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748
Beaver Creek	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152
Destruction Bay	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313
Old Crow	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341
Stewart Crossing (Standby)	0.7000	-	0.7000	0.7000	0.7000	-	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000
Pelly Crossing	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933
Swift River	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244
Other (Standby )	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000
<b>Fuel Variance Dollars</b>													
Haines Junction (Standby)	(123)	-	-	-	-	-	-	(702)	-	(173)	(2,164)	-	(3,162)
Watson Lake	46,068	57,124	46,079	35,669	39,073	40,650	41,804	41,585	35,812	24,441	15,754	(1,429)	422,630
Beaver Creek	(4,174)	(2,858)	(2,150)	(1,815)	(1,828)	(602)	(171)	(1,117)	(1,416)	(2,150)	(6,595)	(8,910)	(33,785)
Destruction Bay	(3,294)	(1,736)	(1,680)	(1,033)	(818)	(16)	226	(127)	(100)	(3,025)	(6,659)	(9,061)	(26,323)
Old Crow	12,386	13,013	9,162	10,865	8,768	8,078	7,777	8,061	8,706	9,897	9,873	8,707	115,294
Stewart Crossing (Standby)	-	(185)	-	-	-	(62)	-	-	-	-	-	-	(247)
Pelly Crossing	-	-	3	-	-	-	-	21	-	827	-	-	851
Swift River	1,184	939	803	669	730	537	448	476	528	609	318	16	7,258
Other (Standby)	(10)	(19)	(17)	(129)	(3)	(14)	(81)	(57)	-	9	(25)	(8)	(352)
<b>Total</b>	<b>52,038</b>	<b>66,279</b>	<b>52,200</b>	<b>44,226</b>	<b>45,922</b>	<b>48,571</b>	<b>50,003</b>	<b>48,141</b>	<b>43,530</b>	<b>30,436</b>	<b>11,503</b>	<b>(10,684)</b>	<b>482,165</b>

Yukon Electrical Company Limited  
Diesel Price Variance Calculations  
2011 - YTD September

	Jan 11	Feb 11	Mar 11	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11	YTD 2011
<b>Actual Generation (Kwh)</b>										
Haines Junction (Standby)	1,838	-	2,042	-	535	6,372	1,436	-	-	12,223
Watson Lake	1,507,200	1,291,200	1,377,600	1,065,600	1,060,800	940,800	1,060,800	1,046,400	993,600	10,344,000
Beaver Creek	194,581	181,771	156,847	144,257	156,788	168,332	184,644	125,741	152,821	1,465,782
Destruction Bay	206,551	183,715	167,547	159,701	128,360	126,124	123,221	121,383	132,880	1,349,482
Old Crow	221,200	204,000	212,400	172,000	154,300	135,300	141,000	122,760	148,200	1,511,160
Stewart Crossing (Standby)	-	-	-	-	600	-	-	2,100	-	3,300
Pelly Crossing	120	-	-	-	58,960	89,520	161,840	38,104	-	348,544
Swift River	26,299	21,824	27,561	18,062	16,540	12,053	11,157	18,726	7,075	159,297
Other (Standby)	1,831	2,790	6,070	-	11,423	124	566	216	9,260	32,280
<b>Total</b>	<b>2,159,620</b>	<b>1,885,300</b>	<b>1,950,067</b>	<b>1,559,620</b>	<b>1,588,306</b>	<b>1,478,625</b>	<b>1,684,664</b>	<b>1,475,430</b>	<b>1,444,466</b>	<b>15,226,098</b>
<b>GRA Forecast Heat Rates (Kwh / Litre)</b>										
Haines Junction (Standby)	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	
Watson Lake	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	3.82	
Beaver Creek	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	
Destruction Bay	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	3.41	
Old Crow	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	3.56	
Stewart Crossing (Standby)	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	
Pelly Crossing	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	
Swift River	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	
Other (Standby)	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	
<b>Total</b>										
<b>Litres @ GRA Approved Heat Rates</b>										
Haines Junction (Standby)	525	-	583	-	153	1,821	410	-	-	3,492
Watson Lake	394,555	338,010	360,628	278,953	277,696	246,283	277,696	273,927	260,105	2,707,853
Beaver Creek	54,658	51,059	44,058	40,522	44,042	47,284	51,866	35,321	42,927	411,737
Destruction Bay	60,572	53,875	49,134	46,833	37,642	36,987	36,135	35,596	38,968	395,743
Old Crow	62,135	57,303	59,663	48,315	43,343	38,006	39,607	34,483	41,629	424,483
Stewart Crossing (Standby)	-	-	-	-	171	-	-	600	180	951
Pelly Crossing	33	-	-	-	16,287	24,729	44,707	10,526	-	96,283
Swift River	8,796	7,299	9,218	6,041	5,532	4,031	3,731	6,263	2,366	53,277
Other (Standby)	523	797	1,734	-	3,284	35	162	62	2,646	9,223
<b>Total</b>	<b>581,796.62</b>	<b>508,344.62</b>	<b>525,018.80</b>	<b>420,663.06</b>	<b>428,129.90</b>	<b>399,175.51</b>	<b>454,315.18</b>	<b>396,777.10</b>	<b>388,820.85</b>	<b>4,103,042</b>
<b>Actual Weighted Average Fuel Price (Cents/Litre)</b>										
Haines Junction (Standby)	1.0902	0.0000	1.0902	0.0000	1.0902	1.0902	1.0902	0.0000	0.0000	
Watson Lake	0.8882	0.8877	0.9527	0.9840	0.9499	0.9418	0.9390	0.9342	0.9457	
Beaver Creek	1.0277	1.0316	1.0634	1.1211	1.1021	1.0923	1.0720	1.0693	1.0863	
Destruction Bay	1.0183	1.0280	1.0843	1.1036	1.0986	1.0899	1.0755	1.0501	1.0701	
Old Crow	1.7916	1.7916	1.7213	1.7255	1.7252	2.0123	1.9309	1.9391	2.0216	
Stewart Crossing (Standby)	0.0000	0.0000	0.0000	0.0000	0.7192	0.0000	0.0000	0.7192	0.7192	
Pelly Crossing	0.7557	0.0000	0.0000	0.0000	0.8051	0.8761	0.9050	0.9074	0.0000	
Swift River	0.9224	0.9364	0.9307	1.0038	1.0042	1.0075	0.9740	0.9704	0.9574	
Other (Standby)	0.8075	0.7444	0.7621	0.0000	1.5778	0.6856	0.6856	0.7792	0.6856	
<b>GRA Forecast Fuel Price (Cents/Litre)</b>										
Haines Junction (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	
Watson Lake	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	0.8748	
Beaver Creek	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	0.8152	
Destruction Bay	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	0.8313	
Old Crow	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	1.9341	
Stewart Crossing (Standby)	0.7000	0.7000	0.7000	0.7000	-	0.7000	0.7000	-	-	
Pelly Crossing	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	0.8933	
Swift River	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	0.9244	
Other (Standby)	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	0.7000	
<b>Fuel Variance Dollars</b>										
Haines Junction (Standby)	(205)	-	(228)	-	(60)	(710)	(160)	-	-	(1,363)
Watson Lake	(5,281)	(4,375)	(28,083)	(30,472)	(20,867)	(16,490)	(17,821)	(16,275)	(18,453)	(158,118)
Beaver Creek	(11,617)	(11,047)	(10,937)	(12,395)	(12,636)	(13,103)	(13,320)	(8,975)	(11,638)	(105,667)
Destruction Bay	(11,330)	(10,595)	(12,429)	(12,753)	(10,062)	(9,566)	(8,823)	(7,789)	(9,307)	(92,653)
Old Crow	8,855	8,167	12,694	10,080	9,054	(2,971)	128	(174)	(3,644)	42,189
Stewart Crossing (Standby)	-	-	-	-	(123)	-	-	(432)	(129)	(684)
Pelly Crossing	5	-	-	-	1,437	425	(521)	(148)	-	1,197
Swift River	17	(87)	(58)	(480)	(441)	(335)	(185)	(288)	(78)	(1,936)
Other (Standby)	(56)	(35)	(108)	-	(2,865)	1	2	(5)	38	(3,028)
<b>Total</b>	<b>(19,612)</b>	<b>(17,973)</b>	<b>(39,148)</b>	<b>(46,019)</b>	<b>(36,563)</b>	<b>(42,750)</b>	<b>(40,700)</b>	<b>(34,086)</b>	<b>(43,211)</b>	<b>(320,062)</b>

**Yukon Electrical Company Limited**  
**Actual Weighted Average Fuel Calculation**  
**Watson Lake**  
**January 2011**

JANUARY		TRANSACTION			INVENTORY			
DATE	INVOICE	LITRES	DOLLARS		PRICE	LITRES	DOLLARS	PRICE
			Estimate	Actual				
Beginning Inventory		123,554		\$108,926.76	0.8816	123,554	\$108,926.76	0.8816
101222	n/a	-48,000	(\$43,608.90)		0.9085	171,554	\$152,535.67	0.8891
101222	923781659	48,000		\$43,608.91	0.9085	123,554	\$108,926.77	0.8816
101228	n/a	-48,000	(\$43,752.00)		0.9115	75,554	\$65,174.77	0.8626
101228	923782091	48,000		\$43,752.00	0.9115	123,554	\$108,926.77	0.8816
101230	n/a	-45,601	(\$41,063.61)		0.9005	77,953	\$67,863.16	0.8706
101230	923781692-A	45,601		\$41,063.70	0.9005	123,554	\$108,926.86	0.8816
110103	923840050	25,815		\$22,988.26	0.8905	149,369	\$131,915.12	0.8831
110104	923841531	20,000		\$17,810.00	0.8905	169,369	\$149,725.12	0.8840
110107	923862564	46,000		\$40,319.88	0.8765	215,369	\$190,045.00	0.8824
110111	923920400	46,000		\$41,055.00	0.8925	261,369	\$231,100.00	0.8842
110113	923930923	45,001		\$40,073.39	0.8905	306,370	\$271,173.39	0.8851
110117	923943721	46,000		\$41,147.00	0.8945	352,370	\$312,320.39	0.8863
110120	923962765	45,509		\$40,980.85	0.9005	397,879	\$353,301.24	0.8880
110124	923973633	49,243		\$43,900.13	0.8915	447,122	\$397,201.37	0.8884
110127	n/a	43,999	\$39,005.11		0.8865	491,121	\$436,206.48	0.8882
		491,121	367,567	\$327,279.72		491,121	\$436,206.48	<b>0.8882 (1)</b>

(1) Actual Weighted Average Fuel Cost for January 2011



2011 ACTUAL		FUEL EXPENSE LITRES												
Fuel Expense Litres		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro		38,042	33,964	37,370	6,184	3,262	65,248	840	449	52,816	0	0	0	238,175
Mayo	Source = Plant Report via System	0	38	200	44,695	9,941	5,110	1,688	43,808	10,540	0	0	0	116,020
Dawson	Generation Report.	320,245	155,887	354,553	370,850	151,943	85,535	73,046	30,500	13,321	0	0	0	1,555,880
Whitehorse		245,082	158,664	451,846	28,081	46,406	127,898	67,984	67,717	62,940	0	0	0	1,256,618
Total		603,369	348,553	843,969	449,810	211,552	283,791	143,558	142,474	139,617	0	0	0	3,166,693
2011 ACTUAL		DIESEL GENERATION (KW.h)												
Diesel Generation (KW.h)		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro		145,320	87,576	105,420	27,853	8,244	254,100	3,150	840	50,190	0	0	0	682,693
Mayo	Source = SCC Month End Report via	0	0	420	174,510	37,380	14,490	6,510	99,750	39,900	0	0	0	372,960
Dawson	System Generation Report.	1,281,792	754,311	1,330,021	1,423,903	590,192	132,456	94,355	111,975	52,187	0	0	0	5,771,192
Whitehorse		940,369	582,235	1,710,095	92,902	177,913	623,709	138,796	243,250	247,733	0	0	0	4,757,002
Total		2,367,481	1,424,122	3,145,956	1,719,168	813,729	1,024,755	242,811	455,815	390,010	0	0	0	11,583,847
2011 ACTUAL		FUEL EXPENSE DOLLARS												
Fuel Expense Dollars		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro		34,239	31,266	36,957	6,230	3,286	68,446	881	471	56,091	0	0	0	237,867.26
Mayo	Source = Plant Report via System	0	29	152	42,621	10,116	5,200	1,729	44,602	10,731	0	0	0	115,180.24
Dawson	Generation Report. Values determined	308,400	156,392	378,475	404,994	168,003	77,409	65,778	27,465	15,369	0	0	0	1,602,286.27
Whitehorse	by Weighted Cost Average	221,234	147,443	452,003	28,268	47,344	131,319	71,121	68,380	63,954	0	0	0	1,231,064.86
Total		563,873.24	335,130.56	867,586.54	482,112.65	228,748.97	282,373.92	139,509.38	140,917.93	146,145.44	0.00	0.00	0.00	3,186,398.63
2011 ACTUAL		CENTS/LITER												
Fuel Expense Litres		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro		90.00	92.06	98.89	100.74	100.74	104.90	104.90	104.90	106.20	0.00	0.00	0.00	99.87
Mayo	Equals Weighted Average Cost/Litre	0.00	76.24	76.23	95.36	101.76	101.76	102.44	101.81	101.81	0.00	0.00	0.00	99.28
Dawson	determined monthly	96.30	100.32	106.75	109.21	110.57	90.50	90.05	90.05	115.38	0.00	0.00	0.00	102.98
Whitehorse		90.27	92.93	100.03	100.66	102.02	102.67	104.61	100.98	101.61	0.00	0.00	0.00	97.97
Total		93.45	96.15	102.80	107.18	108.13	99.50	97.18	98.91	104.68	0.00	0.00	0.00	100.62
2011 ACTUAL		EFFICIENCY												
Fuel Expense Litres		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro		3.82	2.58	2.82	4.50	2.53	3.89	3.75	1.87	0.95	0.00	0.00	0.00	2.87
Mayo	Actual Generation divided by Actual	0.00	0.00	2.10	3.90	3.76	2.84	3.86	2.28	3.79	0.00	0.00	0.00	3.21
Dawson	Litres (for month)	4.00	4.84	3.75	3.84	3.88	1.55	1.29	3.67	3.92	0.00	0.00	0.00	3.71
Whitehorse		3.84	3.67	3.78	3.31	3.83	4.88	2.04	3.59	3.94	0.00	0.00	0.00	3.79
Total		3.92	4.09	3.73	3.82	3.85	3.61	1.69	3.20	2.79	0.00	0.00	0.00	3.66
2011 ACTUAL		FUEL EXPENSE LITRES YTD												
Fuel Expense Litres		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro		38,042	72,006	109,376	115,560	118,822	184,070	184,910	185,359	238,175	238,175	238,175	238,175	238,175
Mayo	YTD Litres of fuel consumed	0	38	238	44,933	54,874	59,984	61,672	105,480	116,020	116,020	116,020	116,020	116,020
Dawson		320,245	476,132	830,685	1,201,535	1,353,478	1,439,013	1,512,059	1,542,559	1,555,880	1,555,880	1,555,880	1,555,880	1,555,880
Whitehorse		245,082	403,746	855,592	883,673	930,079	1,057,977	1,125,961	1,193,678	1,256,618	1,256,618	1,256,618	1,256,618	1,256,618
Total		603,369	951,922	1,795,891	2,245,701	2,457,253	2,741,044	2,884,602	3,027,076	3,166,693	0	0	0	0
2011 ACTUAL		GENERATION (KW.h) YTD												
ACTUAL		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro		145,320	232,896	338,316	366,169	374,413	628,513	631,663	632,503	682,693	682,693	682,693	682,693	682,693
Mayo	YTD Generation	0	0	420	174,930	212,310	226,800	233,310	333,060	372,960	372,960	372,960	372,960	372,960
Dawson		1,281,792	2,036,103	3,366,124	4,790,027	5,380,219	5,512,675	5,607,030	5,719,005	5,771,192	5,771,192	5,771,192	5,771,192	5,771,192
Whitehorse		940,369	1,522,604	3,232,699	3,325,601	3,503,514	4,127,223	4,266,019	4,509,269	4,757,002	4,757,002	4,757,002	4,757,002	4,757,002
Total		2,367,481	3,791,603	6,937,559	8,656,727	9,470,456	10,495,211	10,738,022	11,193,837	11,583,847	0	0	0	0
2011 ACTUAL		DOLLARS YTD												
Fuel Expense Dollars		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro		34,239.28	65,505.15	102,461.99	108,692.04	111,978.33	180,424.45	181,305.63	181,776.64	237,867.26	237,867.26	237,867.26	237,867.26	237,867.26
Mayo	YTD Fuel Expense	0.00	28.97	181.43	42,802.33	52,918.04	58,117.85	59,847.01	104,449.17	115,180.24	115,180.24	115,180.24	115,180.24	115,180.24
Dawson		308,400.44	464,792.88	843,267.61	1,248,261.73	1,416,264.50	1,493,673.68	1,559,451.60	1,586,916.85	1,602,286.27	1,602,286.27	1,602,286.27	1,602,286.27	1,602,286.27
Whitehorse		221,233.52	368,676.80	820,679.31	848,946.89	896,291.09	1,027,609.90	1,098,731.02	1,167,110.53	1,231,064.86	1,231,064.86	1,231,064.86	1,231,064.86	1,231,064.86
Total		563,873.24	899,003.80	1,766,590.34	2,248,702.99	2,477,451.96	2,759,825.88	2,899,335.26	3,040,253.19	3,186,398.63	0.00	0.00	0.00	0.00
2011 ACTUAL		CENTS/LITER YTD												
ACTUAL		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	YTD Dollars / YTD Litres - will vary from	90.00	90.97	93.68	94.06	94.24	98.02	98.05	98.07	99.87	99.87	99.87	99.87	99.87
Mayo	monthly weighted average cost due to	0.00	76.24	76.23	95.26	96.44	96.89	97.04	99.02	99.28	99.28	99.28	99.28	99.28
Dawson	variances in volume and price by month	96.30	97.62	101.51	103.89	104.64	103.80	103.13	102.88	102.98	102.98	102.98	102.98	102.98
Whitehorse		90.27	91.31	95.92	96.07	96.37	97.13	97.58	97.77	97.97	97.97	97.97	97.97	97.97
Total		93.45	94.44	98.37	100.13	100.82	100.69	100.51	100.44	100.62	0.00	0.00	0.00	0.00
2011 ACTUAL		EFFICIENCY YTD												
Fuel Expense Litres		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	YTD Efficiency rate = YTD kWh / YTD	3.82	3.23	3.09	3.17	3.15	3.41	3.42	3.41	2.87	2.87	2.87	2.87	2.87
Mayo	Litres	0.00	0.00	1.76	3.89	3.87	3.78	3.78	3.16	3.21	3.21	3.21	3.21	3.21
Dawson		4.00	4.28	4.05	3.99	3.98	3.83	3.71	3.71	3.71	3.71	3.71	3.71	3.71
Whitehorse		3.84	3.77	3.78	3.76	3.77	3.90	3.79	3.78	3.79	3.79	3.79	3.79	3.79
Total		3.92	3.98	3.86	3.85	3.85	3.83	3.72	3.70	3.66	0.00	0.00	0.00	0.00

FUEL PRICE VARIANCES															
FARO			JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Month Generation		A	145,320.00	87,576.00	105,420.00	27,853.00	8,244.00	254,100.00	3,150.00	840.00	50,190.00	0.00	0.00	0.00	
Month Forecast Eff.	1	B	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	
<b>Forecast Price</b>		C	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	
Actual Price		D	0.9000	0.9206	0.9889	1.0074	1.0074	1.0490	1.0490	1.0490	1.0620	0.0000	0.0000	0.0000	
YTD Generation		E	145,320.00	232,896.00	338,316.00	366,169.00	374,413.00	628,513.00	631,663.00	632,503.00	682,693.00	682,693.00	682,693.00	682,693.00	
YTD Forecast Eff.		F	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	
Forecast Price		G	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	
Actual Price		H	0.90	0.91	0.94	0.94	0.94	0.98	0.98	0.98	1.00	1.00	1.00	1.00	
Monthly Price Variance		I = A/B x (C-D)	3,907.54	1,829.39	94.20	-125.80	-37.23	-4,236.10	-52.52	-14.00	-1,027.29	0.00	0.00	0.00	
Cumulative		J	3,907.54	5,736.93	5,831.13	5,705.33	5,668.10	1,432.00	1,379.48	1,365.48	338.19	338.19	338.19	338.19	
Cumulative YTD price variance		K = E/F x (G-H)	3,907.54	5,603.26	5,461.85	5,506.67	5,429.64	2,169.52	2,122.64	2,094.77	-1,339.02	-1,339.02	-1,339.02	-1,339.02	
Cumulative adjustment		K-J	-0.00	-133.67	-369.28	-198.66	-238.46	737.52	743.16	729.29	-1,677.21	-1,677.21	-1,677.21	-1,677.21	
Current Month adjustment		L	-133.67	-235.62	-235.62	170.62	-39.79	975.97	5.64	-13.87	-2,406.50	0.00	0.00	0.00	
<b>Adjusted Monthly Price Variance</b>		<b>M = I + L</b>	<b>3,907.54</b>	<b>1,695.72</b>	<b>-141.42</b>	<b>44.82</b>	<b>-77.02</b>	<b>-3,260.13</b>	<b>-46.88</b>	<b>-27.87</b>	<b>-3,433.79</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	
MAYO															
Month Generation		A	0	0	420	174,510	37,380	14,490	6,510	99,750	39,900	0	0	0	
Month Forecast Eff.	1	B	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	
<b>Forecast Price</b>		C	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	
Actual Price		D	0.0000	0.7624	0.7623	0.9536	1.0176	1.0176	1.0244	1.0181	1.0181	0.0000	0.0000	0.0000	
YTD Generation		E	0	0	420	174,930	212,310	226,800	233,310	333,060	372,960	372,960	372,960	372,960	
YTD Forecast Eff.		F	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	
Forecast Price		G	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	
Actual Price		H	0.0000	0.7624	0.7623	0.9526	0.9644	0.9689	0.9704	0.9902	0.9928	0.9928	0.9928	0.9928	
Monthly Price Variance		I = A/B x (C-D)	0.00	0.00	24.49	666.50	-538.60	-208.79	-106.43	-1,453.00	-581.20	0.00	0.00	0.00	
Cumulative		J	0.00	0.00	24.49	690.99	152.39	-56.40	-162.83	-1,615.83	-2,197.03	-2,197.03	-2,197.03	-2,197.03	
Cumulative YTD price variance		K = E/F x (G-H)	0.00	0.00	24.49	718.60	159.96	-122.07	-226.54	-2,204.01	-2,737.37	-2,737.37	-2,737.37	-2,737.37	
Cumulative adjustment		K-J	0.00	0.00	0.00	27.61	7.57	-65.67	-63.71	-588.18	-540.34	-540.34	-540.34	-540.34	
Current Month adjustment		L	0.00	0.00	0.00	27.61	-20.04	-73.24	1.96	-524.47	47.84	0.00	0.00	0.00	
<b>Adjusted Monthly Price Variance</b>		<b>M = I + L</b>	<b>0.00</b>	<b>0.00</b>	<b>24.49</b>	<b>694.11</b>	<b>-558.64</b>	<b>-282.03</b>	<b>-104.47</b>	<b>-1,977.47</b>	<b>-533.36</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	
DAWSON															
Month Generation		A	1,281,792	754,311	1,330,021	1,423,903	590,192	132,456	94,355	111,975	52,187	0	0	0	
Month Forecast Eff.	1	B	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	
<b>Forecast Price</b>		C	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	
Actual Price		D	0.9630	1.0032	1.0675	1.0921	1.1057	0.9050	0.9005	0.9005	1.1538	0.0000	0.0000	0.0000	
YTD Generation		E	1,281,792	2,036,103	3,366,124	4,790,027	5,380,219	5,512,675	5,607,030	5,719,005	5,771,192	5,771,192	5,771,192	5,771,192	
YTD Forecast Eff.		F	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	
Forecast Price		G	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	
Actual Price		H	0.9630	0.9762	1.0151	1.0389	1.0464	1.0380	1.0313	1.0288	1.0298	1.0298	1.0298	1.0298	
Monthly Price Variance		I = A/B x (C-D)	4,377.06	-6,069.38	-35,039.09	-47,491.79	-21,976.00	2,641.57	2,002.69	2,376.68	-2,658.02	0.00	0.00	0.00	
Cumulative		J	4,377.06	-1,692.32	-36,731.41	-84,223.20	-106,199.20	-103,557.63	-101,554.94	-99,178.26	-101,836.28	-101,836.28	-101,836.28	-101,836.28	
Cumulative YTD price variance		K = E/F x (G-H)	4,377.06	-687.36	-38,501.62	-87,188.31	-109,426.92	-98,921.64	-90,004.95	-87,587.16	-90,146.32	-90,146.32	-90,146.32	-90,146.32	
Cumulative adjustment		K-J	-0.00	1,004.96	-1,770.21	-2,965.11	-3,227.72	4,635.99	11,549.99	11,591.10	11,689.96	11,689.96	11,689.96	11,689.96	
Current Month adjustment		L	1,004.96	-2,775.17	-1,194.90	-1,194.90	-262.61	7,863.71	6,914.00	41.12	98.86	0.00	0.00	0.00	
<b>Adjusted Monthly Price Variance</b>		<b>M = I + L</b>	<b>4,377.06</b>	<b>-5,064.42</b>	<b>-37,814.26</b>	<b>-48,686.69</b>	<b>-22,238.61</b>	<b>10,505.28</b>	<b>8,916.69</b>	<b>2,417.80</b>	<b>-2,559.16</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	
WHITEHORSE															
Month Generation		A	940,369	582,235	1,710,095	92,902	177,913	623,709	138,796	243,250	247,733	0	0	0	
Month Forecast Eff.	1	B	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	
<b>Forecast Price</b>		C	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	
Actual Price		D	0.9027	0.9293	1.0003	1.0066	1.0202	1.0267	1.0461	1.0098	1.0161	0.0000	0.0000	0.0000	
YTD Generation		E	940,369	1,522,604	3,232,699	3,325,601	3,503,514	4,127,223	4,266,019	4,509,269	4,757,002	4,757,002	4,757,002	4,757,002	
YTD Forecast Eff.		F	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	
Forecast Price		G	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	
Actual Price		H	0.9027	0.9131	0.9592	0.9607	0.9637	0.9713	0.9758	0.9777	0.9797	0.9797	0.9797	0.9797	
Monthly Price Variance		I = A/B x (C-D)	16,134.98	5,355.17	-20,657.53	-1,297.41	-3,207.61	-12,464.17	-3,579.81	-3,625.70	-4,162.20	0.00	0.00	0.00	
Cumulative		J	16,134.98	21,490.15	832.62	-464.79	-3,672.40	-16,136.57	-19,716.38	-23,342.08	-27,504.28	-27,504.28	-27,504.28	-27,504.28	
Cumulative YTD price variance		K = E/F x (G-H)	16,134.98	21,361.84	779.43	-699.50	-3,851.77	-13,959.67	-20,201.30	-23,954.73	-28,008.13	-28,008.13	-28,008.13	-28,008.13	
Cumulative adjustment		K-J	-0.00	-128.31	-53.19	-234.71	-179.37	2,176.90	-484.92	-612.65	-503.85	-503.85	-503.85	-503.85	
Current Month adjustment		L	-128.30	-128.30	75.12	-181.53	55.35	2,356.27	-2,661.82	-127.73	108.80	0.00	0.00	0.00	
<b>Adjusted Monthly Price Variance</b>		<b>M = I + L</b>	<b>16,134.98</b>	<b>5,226.87</b>	<b>-20,582.41</b>	<b>-1,478.94</b>	<b>-3,152.26</b>	<b>-10,107.90</b>	<b>-6,241.63</b>	<b>-3,753.43</b>	<b>-4,053.40</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	
1 YEC has discovered that the efficiency rate used in this calculation was not updated for YEC's 2009 GRA results; the impact is immaterial and will be corrected at the next quarterly filing.															
PRICE VARIANCE SUMMARY															
			JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro - (962010)			3,907.54	1,695.72	-141.42	44.82	-77.02	-3,260.13	-46.88	-27.87	-3,433.79	0.00	0.00	0.00	-1,339.02
Mayo - (962030)	DFPV by community aggregated to one		0.00	0.00	24.49	694.11	-558.64	-282.03	-104.47	-1,977.47	-533.36	0.00	0.00	0.00	-2,737.37
Dawson - (962020)	value for entry into DFPV account		4,377.06	-5,064.42	-37,814.26	-48,686.69	-22,238.61	10,505.28	8,916.69	2,417.80	-2,559.16	0.00	0.00	0.00	-90,146.31
Whitehorse - (962070)			16,134.98	5,226.87	-20,582.41	-1,478.94	-3,152.26	-10,107.90	-6,241.63	-3,753.43	-4,053.40	0.00	0.00	0.00	-28,008.13
<b>Total</b>			<b>24,419.58</b>	<b>1,858.17</b>	<b>-58,513.60</b>	<b>-49,426.70</b>	<b>-26,026.53</b>	<b>-3,144.78</b>	<b>2,523.71</b>	<b>-3,340.97</b>	<b>-10,579.71</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>-122,230.83</b>
Cumulative Deferred Fuel			24,419.58	26,277.75	-32,235.84	-81,662.55	-107,689.08	-110,833.86	-108,310.15	-111,651.12	-122,230.83	-122,230.83	-122,230.83	-122,230.83	

ACCOUNT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>YEC:</b>													
<b>Rider F Collection:</b>													
CIS	(2,956.96)	(2,573.40)	(2,806.76)	(2,365.68)	(2,464.21)	(2,885.96)	9,545.46	10,960.83	10,321.66	0.00	0.00	0.00	14,774.98
RS 32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1,766.06	0.00	0.00	0.00	-1,766.06
Industrial	-4,695.53	-675.90	-3,361.95	-3,199.41	-3,217.77	-2,943.63	-2,912.58	-3,325.41	42,930.47	0.00	0.00	0.00	18,598.29
	-7,652.49	-3,249.30	-6,168.71	-5,565.09	-5,681.98	-5,829.59	6,632.88	7,635.42	51,486.07	0.00	0.00	0.00	31,607.21
Fuel Variance	24,419.58	1,858.17	-58,513.60	-49,426.70	<b>-26,026.53</b>	-3,144.78	2,523.71	-3,340.97	-10,579.71	0.00	0.00	0.00	<b>-122,230.83</b>
Rider F Collection	-7,652.49	-3,249.30	-6,168.71	-5,565.09	-5,681.98	-5,829.59	6,632.88	7,635.42	51,486.07	0.00	0.00	0.00	31,607.21
Over/(Under) Collection	16,767.09	-1,391.13	-64,682.31	-54,991.79	-31,708.51	-8,974.37	9,156.59	4,294.45	40,906.36	0.00	0.00	0.00	-90,623.62
Transfer to/from YECL	-24,696.10	-36,667.00	-7,558.34	-8,730.12	-7,575.22	-5,024.57	23,895.26	20,541.43	-9,029.03	0.00	0.00	0.00	-54,843.70
Net Over/(Under) Collection	-7,929.01	-38,058.13	-72,240.65	-63,721.91	-39,283.73	-13,998.94	33,051.85	24,835.88	31,877.32	0.00	0.00	0.00	<b>-145,467.32</b>
Beginning Deferred Fuel Price Adjustment	37,565.39	29,636.38	-8,421.74	-80,662.40	-144,384.31	-183,668.04	-197,666.99	-164,615.14	-139,779.26	-107,901.94	-107,901.94	-107,901.94	
Current Month Addition	-7,929.01	-38,058.13	-72,240.65	-63,721.91	-39,283.73	-13,998.94	33,051.85	24,835.88	31,877.32	0.00	0.00	0.00	<b>Vs</b>
Ending Deferred Fuel Price Adjustment	29,636.38	-8,421.74	-80,662.40	-144,384.31	-183,668.04	-197,666.99	-164,615.14	-139,779.26	-107,901.94	-107,901.94	-107,901.94	<b>-107,901.94</b>	<b>Ending balance</b>

<b>YECL:</b>													
Fuel Variance	-19,115	-17,713	-38,574	-45,860	-36,872	-47,094	-49,590	-36,728	-43,527	0.00	0.00	0.00	-335,073.00
Rider F Collection	-31,189.05	-24,902.31	-27,624.20	-22,505.44	-21,267.64	-18,782.60	70,849.02	69,178.35	74,736.68	0.00	0.00	0.00	68,492.81
Over/(Under) Collection	-50,304.05	-42,615.31	-66,198.20	-68,365.44	-58,139.64	-65,876.60	21,259.02	32,450.35	31,209.68	0.00	0.00	0.00	-266,580.19
Transfer to/from YEC	24,696.10	36,667.00	7,558.34	8,730.12	7,575.22	5,024.57	-23,895.26	-20,541.43	9,029.03	0.00	0.00	0.00	54,843.70
Net Over/(Under) Collection	-25,607.95	-5,948.31	-58,639.86	-59,635.32	-50,564.42	-60,852.03	-2,636.24	11,908.92	40,238.71	0.00	0.00	0.00	<b>-211,736.49</b>
Beginning Deferred Fuel	10,697.07	-14,910.88	-20,859.19	-79,499.05	-139,134.37	-189,698.79	-250,550.82	-253,187.05	-241,278.14	-201,039.42	-201,039.42	-201,039.42	
Current Month Addition	-25,607.95	-5,948.31	-58,639.86	-59,635.32	-50,564.42	-60,852.03	-2,636.24	11,908.92	40,238.71	0.00	0.00	0.00	<b>Vs</b>
Ending Deferred Fuel	-14,910.88	-20,859.19	-79,499.05	-139,134.37	-189,698.79	-250,550.82	-253,187.05	-241,278.14	-201,039.42	-201,039.42	-201,039.42	<b>-201,039.42</b>	<b>Ending balance</b>

<b>Combined:</b>													
(Both Companies)													
Fuel Variance	5,305	(15,855)	(97,088)	(95,287)	(62,899)	(50,239)	(47,066)	(40,069)	(54,107)	-	-	-	-457,303.83
Rider F Collection	-38,841.54	-28,151.61	-33,792.91	-28,070.53	-26,949.62	-24,612.19	77,481.90	76,813.77	126,222.75	0.00	0.00	0.00	100,100.02
Over/(Under) Collection	-33,536.96	-44,006.44	-130,880.51	-123,357.23	-89,848.15	-74,850.97	30,415.61	36,744.80	72,116.04	0.00	0.00	0.00	-357,203.81
Transfer to/from YEC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Over/(Under) Collection	-33,536.96	-44,006.44	-130,880.51	-123,357.23	-89,848.15	-74,850.97	30,415.61	36,744.80	72,116.04	0.00	0.00	0.00	<b>-357,203.81</b>
Beginning Deferred Fuel	48,262.46	14,725.50	-29,280.94	-160,161.45	-283,518.68	-373,366.83	-448,217.80	-417,802.19	-381,057.39	-308,941.36	-308,941.36	-308,941.36	
Current Month Addition	-33,536.96	-44,006.44	-130,880.51	-123,357.23	-89,848.15	-74,850.97	30,415.61	36,744.80	72,116.04	0.00	0.00	0.00	<b>Vs</b>
Ending Deferred Fuel	14,725.50	-29,280.94	-160,161.45	-283,518.68	-373,366.83	-448,217.80	-417,802.19	-381,057.39	-308,941.36	-308,941.36	-308,941.36	<b>-308,941.36</b>	<b>Ending balance</b>

2011 ACTUAL		FUEL EXPENSE LITRES											
Fuel Expense Litres	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	38,042	33,964	37,370	6,184	3,262	65,248	840	449	52,816	0	0	0	238,175
Mayo	0	38	200	44,695	9,941	5,110	1,688	43,808	10,540	0	0	0	116,020
Dawson	320,245	155,887	354,553	370,850	151,943	85,535	73,046	30,500	13,321	0	0	0	1,555,880
Whitehorse	245,082	158,664	451,846	28,081	46,406	127,898	67,984	67,717	62,940	0	0	0	1,256,618
Total	603,369	348,553	843,969	449,810	211,552	283,791	143,558	142,474	139,617	0	0	0	3,166,693

2011 ACTUAL		DIESEL GENERATION (KW.h)											
Diesel Generation (KW.h)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	145,320	87,576	105,420	27,853	8,244	254,100	3,150	840	50,190	0	0	0	682,693
Mayo	0	0	420	174,510	37,380	14,490	6,510	99,750	39,900	0	0	0	372,960
Dawson	1,281,792	754,311	1,330,021	1,423,903	590,192	132,456	94,355	111,975	52,187	0	0	0	5,771,192
Whitehorse	940,369	582,235	1,710,095	92,902	177,913	623,709	138,796	243,250	247,733	0	0	0	4,757,002
Total	2,367,481	1,424,122	3,145,956	1,719,168	813,729	1,024,755	242,811	455,815	390,010	0	0	0	11,583,847

2011 ACTUAL		FUEL EXPENSE DOLLARS											
Fuel Expense Dollars	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	34,239	31,266	36,957	6,230	3,286	68,446	881	471	56,091	0	0	0	237,867.26
Mayo	0	29	152	42,621	10,116	5,200	1,729	44,602	10,731	0	0	0	115,180.24
Dawson	308,400	156,392	378,475	404,994	168,003	77,409	65,778	27,465	15,369	0	0	0	1,602,286.27
Whitehorse	221,234	147,443	452,003	28,268	47,344	131,319	71,121	68,380	63,954	0	0	0	1,231,064.86
Total	563,873.24	335,130.56	867,586.54	482,112.65	228,748.97	282,373.92	139,509.38	140,917.93	146,145.44	0.00	0.00	0.00	3,186,398.63

2011 ACTUAL		CENTS/LITER											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	90.00	92.06	98.89	100.74	100.74	104.90	104.90	104.90	106.20	0.00	0.00	0.00	99.87
Mayo	0.00	76.24	76.23	95.36	101.76	101.76	102.44	101.81	101.81	0.00	0.00	0.00	99.28
Dawson	96.30	100.32	106.75	109.21	110.57	90.50	90.05	90.05	115.38	0.00	0.00	0.00	102.98
Whitehorse	90.27	92.93	100.03	100.66	102.02	102.67	104.61	100.98	101.61	0.00	0.00	0.00	97.97
Total	93.45	96.15	102.80	107.18	108.13	99.50	97.18	98.91	104.68	0.00	0.00	0.00	100.62

2011 ACTUAL		EFFICIENCY											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	3.82	2.58	2.82	4.50	2.53	3.89	3.75	1.87	0.95	0.00	0.00	0.00	2.87
Mayo	0.00	0.00	2.10	3.90	3.76	2.84	3.86	2.28	3.79	0.00	0.00	0.00	3.21
Dawson	4.00	4.84	3.75	3.84	3.88	1.55	1.29	3.67	3.92	0.00	0.00	0.00	3.71
Whitehorse	3.84	3.67	3.78	3.31	3.83	4.88	2.04	3.59	3.94	0.00	0.00	0.00	3.79
Total	3.92	4.09	3.73	3.82	3.85	3.61	1.69	3.20	2.79	0.00	0.00	0.00	3.66

2011 ACTUAL		FUEL EXPENSE LITRES YTD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	38,042	72,006	109,376	115,560	118,822	184,070	184,910	185,359	238,175	238,175	238,175	238,175	238,175
Mayo	0	38	238	44,933	54,874	59,984	61,672	105,480	116,020	116,020	116,020	116,020	116,020
Dawson	320,245	476,132	830,685	1,201,535	1,353,478	1,439,013	1,512,059	1,542,559	1,555,880	1,555,880	1,555,880	1,555,880	1,555,880
Whitehorse	245,082	403,746	855,592	883,673	930,079	1,057,977	1,125,961	1,193,678	1,256,618	1,256,618	1,256,618	1,256,618	1,256,618
Total	603,369	951,922	1,795,891	2,245,701	2,457,253	2,741,044	2,884,602	3,027,076	3,166,693	0	0	0	0

2011 ACTUAL		GENERATION (KW.h) YTD											
	ACTUAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Faro	145,320	232,896	338,316	366,169	374,413	628,513	631,663	632,503	682,693	682,693	682,693	682,693	682,693
Mayo	0	0	420	174,930	212,310	226,800	233,310	333,060	372,960	372,960	372,960	372,960	372,960
Dawson	1,281,792	2,036,103	3,366,124	4,790,027	5,380,219	5,512,675	5,607,030	5,719,005	5,771,192	5,771,192	5,771,192	5,771,192	5,771,192
Whitehorse	940,369	1,522,604	3,232,699	3,325,601	3,503,514	4,127,223	4,266,019	4,509,269	4,757,002	4,757,002	4,757,002	4,757,002	4,757,002
Total	2,367,481	3,791,603	6,937,559	8,656,727	9,470,456	10,495,211	10,738,022	11,193,837	11,583,847	0	0	0	0

2011 ACTUAL		DOLLARS YTD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	34,239.28	65,505.15	102,461.99	108,692.04	111,978.33	180,424.45	181,305.63	181,776.64	237,867.26	237,867.26	237,867.26	237,867.26	237,867.26
Mayo	0.00	28.97	181.43	42,802.33	52,918.04	58,117.85	59,847.01	104,449.17	115,180.24	115,180.24	115,180.24	115,180.24	115,180.24
Dawson	308,400.44	464,792.88	843,267.61	1,248,261.73	1,416,264.50	1,493,673.68	1,559,451.60	1,586,916.85	1,602,286.27	1,602,286.27	1,602,286.27	1,602,286.27	1,602,286.27
Whitehorse	221,233.52	368,676.80	820,679.31	848,946.89	896,291.09	1,027,609.90	1,098,731.02	1,167,110.53	1,231,064.86	1,231,064.86	1,231,064.86	1,231,064.86	1,231,064.86
Total	563,873.24	899,003.80	1,766,590.34	2,248,702.99	2,477,451.96	2,759,825.88	2,899,335.26	3,040,253.19	3,186,398.63	0.00	0.00	0.00	0.00

2011 ACTUAL		CENTS/LITER YTD											
	ACTUAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Faro	90.00	90.97	93.68	94.06	94.24	98.02	98.05	98.07	99.87	99.87	99.87	99.87	99.87
Mayo	0.00	76.24	76.23	95.26	96.44	96.89	97.04	99.02	99.28	99.28	99.28	99.28	99.28
Dawson	96.30	97.62	101.51	103.89	104.64	103.80	103.13	102.88	102.98	102.98	102.98	102.98	102.98
Whitehorse	90.27	91.31	95.92	96.07	96.37	97.13	97.58	97.77	97.97	97.97	97.97	97.97	97.97
Total	93.45	94.44	98.37	100.13	100.82	100.69	100.51	100.44	100.62	0.00	0.00	0.00	0.00

2011 ACTUAL	EFFICIENCY YTD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Faro	3.82	3.23	3.09	3.17	3.15	3.41	3.42	3.41	2.87	2.87	2.87	2.87
Mayo	0.00	0.00	1.76	3.89	3.87	3.78	3.78	3.16	3.21	3.21	3.21	3.21
Dawson	4.00	4.28	4.05	3.99	3.98	3.83	3.71	3.71	3.71	3.71	3.71	3.71
Whitehorse	3.84	3.77	3.78	3.76	3.77	3.90	3.79	3.78	3.79	3.79	3.79	3.79
Total	3.92	3.98	3.86	3.85	3.85	3.83	3.72	3.70	3.66	0.00	0.00	0.00

**FUEL PRICE VARIANCES**

FARO	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Month Generation	145,320.00	87,576.00	105,420.00	27,853.00	8,244.00	254,100.00	3,150.00	840.00	50,190.00	0.00	0.00	0.00
Month Forecast Eff.	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42
<b>Forecast Price</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>
Actual Price	0.9000	0.9206	0.9889	1.0074	1.0074	1.0490	1.0490	1.0490	1.0620	0.0000	0.0000	0.0000
YTD Generation	145,320.00	232,896.00	338,316.00	366,169.00	374,413.00	628,513.00	631,663.00	632,503.00	682,693.00	682,693.00	682,693.00	682,693.00
YTD Forecast Eff.	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42
Forecast Price	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920
Actual Price	0.90	0.91	0.94	0.94	0.94	0.98	0.98	0.98	1.00	1.00	1.00	1.00
Monthly Price Variance	3,907.54	1,829.39	94.20	-125.80	-37.23	-4,236.10	-52.52	-14.00	-1,027.29	0.00	0.00	0.00
Cumulative	3,907.54	5,736.93	5,831.13	5,705.33	5,668.10	1,432.00	1,379.48	1,365.48	338.19	338.19	338.19	338.19
Cumulative YTD price variance	3,907.54	5,603.26	5,461.85	5,506.67	5,429.64	2,169.52	2,122.64	2,094.77	-1,339.02	-1,339.02	-1,339.02	-1,339.02
Cumulative adjustment	-0.00	-133.67	-369.28	-198.66	-238.46	737.52	743.16	729.29	-1,677.21	-1,677.21	-1,677.21	-1,677.21
Current Month adjustment		-133.67	-235.62	170.62	-39.79	975.97	5.64	-13.87	-2,406.50	0.00	0.00	0.00
<b>Adjusted Monthly Price Variance</b>	<b>3,907.54</b>	<b>1,695.72</b>	<b>-141.42</b>	<b>44.82</b>	<b>-77.02</b>	<b>-3,260.13</b>	<b>-46.88</b>	<b>-27.87</b>	<b>-3,433.79</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

MAYO	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Month Generation	0	0	420	174,510	37,380	14,490	6,510	99,750	39,900	0	0	0
Month Forecast Eff.	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51
<b>Forecast Price</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>
Actual Price	0.0000	0.7624	0.7623	0.9536	1.0176	1.0176	1.0244	1.0181	1.0181	0.0000	0.0000	0.0000
YTD Generation	0	0	420	174,930	212,310	226,800	233,310	333,060	372,960	372,960	372,960	372,960
YTD Forecast Eff.	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51
Forecast Price	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670
Actual Price	0.0000	0.7624	0.7623	0.9526	0.9644	0.9689	0.9704	0.9902	0.9928	0.9928	0.9928	0.9928
Monthly Price Variance	0.00	0.00	24.49	666.50	-538.60	-208.79	-106.43	-1,453.00	-581.20	0.00	0.00	0.00
Cumulative	0.00	0.00	24.49	690.99	152.39	-56.40	-162.83	-1,615.83	-2,197.03	-2,197.03	-2,197.03	-2,197.03
Cumulative YTD price variance	0.00	0.00	24.49	718.60	159.96	-122.07	-226.54	-2,204.01	-2,737.37	-2,737.37	-2,737.37	-2,737.37
Cumulative adjustment	0.00	0.00	0.00	27.61	7.57	-65.67	-63.71	-588.18	-540.34	-540.34	-540.34	-540.34
Current Month adjustment		0.00	0.00	27.61	-20.04	-73.24	1.96	-524.47	47.84	0.00	0.00	0.00
<b>Adjusted Monthly Price Variance</b>	<b>0.00</b>	<b>0.00</b>	<b>24.49</b>	<b>694.11</b>	<b>-558.64</b>	<b>-282.03</b>	<b>-104.47</b>	<b>-1,977.47</b>	<b>-533.36</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

DAWSON	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Month Generation	1,281,792	754,311	1,330,021	1,423,903	590,192	132,456	94,355	111,975	52,187	0	0	0
Month Forecast Eff.	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51
<b>Forecast Price</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>
Actual Price	0.9630	1.0032	1.0675	1.0921	1.1057	0.9050	0.9005	0.9005	1.1538	0.0000	0.0000	0.0000
YTD Generation	1,281,792	2,036,103	3,366,124	4,790,027	5,380,219	5,512,675	5,607,030	5,719,005	5,771,192	5,771,192	5,771,192	5,771,192
YTD Forecast Eff.	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51
Forecast Price	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750
Actual Price	0.9630	0.9762	1.0151	1.0389	1.0464	1.0380	1.0313	1.0288	1.0298	1.0298	1.0298	1.0298
Monthly Price Variance	4,377.06	-6,069.38	-35,039.09	-47,491.79	-21,976.00	2,641.57	2,002.69	2,376.68	-2,658.02	0.00	0.00	0.00
Cumulative	4,377.06	-1,692.32	-36,731.41	-84,223.20	-106,199.20	-103,557.63	-101,554.94	-99,178.26	-101,836.28	-101,836.28	-101,836.28	-101,836.28
Cumulative YTD price variance	4,377.06	-687.36	-38,501.62	-87,188.31	-109,426.92	-98,921.64	-90,004.95	-87,587.16	-90,146.32	-90,146.32	-90,146.32	-90,146.32
Cumulative adjustment	-0.00	1,004.96	-1,770.21	-2,965.11	-3,227.72	4,635.99	11,549.99	11,591.10	11,689.96	11,689.96	11,689.96	11,689.96
Current Month adjustment		1,004.96	-2,775.17	-1,194.90	-262.61	7,863.71	6,914.00	41.12	98.86	0.00	0.00	0.00
<b>Adjusted Monthly Price Variance</b>	<b>4,377.06</b>	<b>-5,064.42</b>	<b>-37,814.26</b>	<b>-48,686.69</b>	<b>-22,238.61</b>	<b>10,505.28</b>	<b>8,916.69</b>	<b>2,417.80</b>	<b>-2,559.16</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

WHITEHORSE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Month Generation	940,369	582,235	1,710,095	92,902	177,913	623,709	138,796	243,250	247,733	0	0	0
Month Forecast Eff.	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34
<b>Forecast Price</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>
Actual Price	0.9027	0.9293	1.0003	1.0066	1.0202	1.0267	1.0461	1.0098	1.0161	0.0000	0.0000	0.0000
YTD Generation	940,369	1,522,604	3,232,699	3,325,601	3,503,514	4,127,223	4,266,019	4,509,269	4,757,002	4,757,002	4,757,002	4,757,002
YTD Forecast Eff.	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34
Forecast Price	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Actual Price	0.9027	0.9131	0.9592	0.9607	0.9637	0.9713	0.9758	0.9777	0.9797	0.9797	0.9797	0.9797
Monthly Price Variance	16,134.98	5,355.17	-20,657.53	-1,297.41	-3,207.61	-12,464.17	-3,579.81	-3,625.70	-4,162.20	0.00	0.00	0.00
Cumulative	16,134.98	21,490.15	832.62	-464.79	-3,672.40	-16,136.57	-19,716.38	-23,342.08	-27,504.28	-27,504.28	-27,504.28	-27,504.28
Cumulative YTD price variance	16,134.98	21,361.84	779.43	-699.50	-3,851.77	-13,959.67	-20,201.30	-23,954.73	-28,008.13	-28,008.13	-28,008.13	-28,008.13
Cumulative adjustment	-0.00	-128.31	-53.19	-234.71	-179.37	2,176.90	-484.92	-612.65	-503.85	-503.85	-503.85	-503.85
Current Month adjustment		-128.30	75.12	-181.53	55.35	2,356.27	-2,661.82	-127.73	108.80	0.00	0.00	0.00
<b>Adjusted Monthly Price Variance</b>	<b>16,134.98</b>	<b>5,226.87</b>	<b>-20,582.41</b>	<b>-1,478.94</b>	<b>-3,152.26</b>	<b>-10,107.90</b>	<b>-6,241.63</b>	<b>-3,753.43</b>	<b>-4,053.40</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

PRICE VARIANCE SUMMARY													
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro - (962010)	3,907.54	1,695.72	-141.42	44.82	-77.02	-3,260.13	-46.88	-27.87	-3,433.79	0.00	0.00	0.00	-1,339.02
Mayo - (962030)	0.00	0.00	24.49	694.11	-558.64	-282.03	-104.47	-1,977.47	-533.36	0.00	0.00	0.00	-2,737.37
Dawson - (962020)	4,377.06	-5,064.42	-37,814.26	-48,686.69	-22,238.61	10,505.28	8,916.69	2,417.80	-2,559.16	0.00	0.00	0.00	-90,146.31
Whitehorse - (962070)	16,134.98	5,226.87	-20,582.41	-1,478.94	-3,152.26	-10,107.90	-6,241.63	-3,753.43	-4,053.40	0.00	0.00	0.00	-28,008.13
<b>Total</b>	<b>24,419.58</b>	<b>1,858.17</b>	<b>-58,513.60</b>	<b>-49,426.70</b>	<b>-26,026.53</b>	<b>-3,144.78</b>	<b>2,523.71</b>	<b>-3,340.97</b>	<b>-10,579.71</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>-122,230.83</b>

Cumulative Deferred Fuel	24,419.58	26,277.75	-32,235.84	-81,662.55	-107,689.08	-110,833.86	-108,310.15	-111,651.12	-122,230.83	-122,230.83	-122,230.83	-122,230.83	
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**DEFERRED FUEL PRICE VARIANCE**

ACCOUNT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>YEC:</b>													
<b>Rider F Collection:</b>													
CIS	(2,956.96)	(2,573.40)	(2,806.76)	(2,365.68)	(2,464.21)	(2,885.96)	9,545.46	10,960.83	10,321.66	0.00	0.00	0.00	14,774.98
RS 32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1,766.06	0.00	0.00	0.00	-1,766.06
Industrial	-4,695.53	-675.90	-3,361.95	-3,199.41	-3,217.77	-2,943.63	-2,912.58	-3,325.41	42,930.47	0.00	0.00	0.00	18,598.29
	-7,652.49	-3,249.30	-6,168.71	-5,565.09	-5,681.98	-5,829.59	6,632.88	7,635.42	51,486.07	0.00	0.00	0.00	31,607.21
Fuel Variance	24,419.58	1,858.17	-58,513.60	-49,426.70	-26,026.53	-3,144.78	2,523.71	-3,340.97	-10,579.71	0.00	0.00	0.00	-122,230.83
Rider F Collection	-7,652.49	-3,249.30	-6,168.71	-5,565.09	-5,681.98	-5,829.59	6,632.88	7,635.42	51,486.07	0.00	0.00	0.00	31,607.21
Over/(Under) Collection	16,767.09	-1,391.13	-64,682.31	-54,991.79	-31,708.51	-8,974.37	9,156.59	4,294.45	40,906.36	0.00	0.00	0.00	-90,623.62
Transfer to/from YECL	-24,696.10	-36,667.00	-7,558.34	-8,730.12	-7,575.22	-5,024.57	23,895.26	20,541.43	-9,029.03	0.00	0.00	0.00	-54,843.70
Net Over/(Under) Collection	-7,929.01	-38,058.13	-72,240.65	-63,721.91	-39,283.73	-13,998.94	33,051.85	24,835.88	31,877.32	0.00	0.00	0.00	-145,467.32
													<b>Net Change</b>
Beginning Deferred Fuel Price Adjustment	37,565.39	29,636.38	-8,421.74	-80,662.40	-144,384.31	-183,668.04	-197,666.99	-164,615.14	-139,779.26	-107,901.94	-107,901.94	-107,901.94	
Current Month Addition	-7,929.01	-38,058.13	-72,240.65	-63,721.91	-39,283.73	-13,998.94	33,051.85	24,835.88	31,877.32	0.00	0.00	0.00	<b>Vs</b>
Ending Deferred Fuel Price Adjustment	29,636.38	-8,421.74	-80,662.40	-144,384.31	-183,668.04	-197,666.99	-164,615.14	-139,779.26	-107,901.94	-107,901.94	-107,901.94	-107,901.94	<b>Ending balance</b>

**YECL:**

Fuel Variance	-19,115	-17,713	-38,574	-45,860	-36,872	-47,094	-49,590	-36,728	-43,527	0.00	0.00	0.00	-335,073.00
Rider F Collection	-31,189.05	-24,902.31	-27,624.20	-22,505.44	-21,267.64	-18,782.60	70,849.02	69,178.35	74,736.68	0.00	0.00	0.00	68,492.81
Over/(Under) Collection	-50,304.05	-42,615.31	-66,198.20	-68,365.44	-58,139.64	-65,876.60	21,259.02	32,450.35	31,209.68	0.00	0.00	0.00	-266,580.19
Transfer to/from YEC	24,696.10	36,667.00	7,558.34	8,730.12	7,575.22	5,024.57	-23,895.26	-20,541.43	9,029.03	0.00	0.00	0.00	54,843.70
Net Over/(Under) Collection	-25,607.95	-5,948.31	-58,639.86	-59,635.32	-50,564.42	-60,852.03	-2,636.24	11,908.92	40,238.71	0.00	0.00	0.00	-211,736.49
													<b>Net Change</b>
Beginning Deferred Fuel	10,697.07	-14,910.88	-20,859.19	-79,499.05	-139,134.37	-189,698.79	-250,550.82	-253,187.05	-241,278.14	-201,039.42	-201,039.42	-201,039.42	
Current Month Addition	-25,607.95	-5,948.31	-58,639.86	-59,635.32	-50,564.42	-60,852.03	-2,636.24	11,908.92	40,238.71	0.00	0.00	0.00	<b>Vs</b>
Ending Deferred Fuel	-14,910.88	-20,859.19	-79,499.05	-139,134.37	-189,698.79	-250,550.82	-253,187.05	-241,278.14	-201,039.42	-201,039.42	-201,039.42	-201,039.42	<b>Ending balance</b>

**Combined:**

<b>(Both Companies)</b>													
Fuel Variance	5,305	(15,855)	(97,088)	(95,287)	(62,899)	(50,239)	(47,066)	(40,069)	(54,107)	-	-	-	-457,303.83
Rider F Collection	-38,841.54	-28,151.61	-33,792.91	-28,070.53	-26,949.62	-24,612.19	77,481.90	76,813.77	126,222.75	0.00	0.00	0.00	100,100.02
Over/(Under) Collection	-33,536.96	-44,006.44	-130,880.51	-123,357.23	-89,848.15	-74,850.97	30,415.61	36,744.80	72,116.04	0.00	0.00	0.00	-357,203.81
Transfer to/from YEC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Over/(Under) Collection	-33,536.96	-44,006.44	-130,880.51	-123,357.23	-89,848.15	-74,850.97	30,415.61	36,744.80	72,116.04	0.00	0.00	0.00	-357,203.81
													<b>Net Change</b>
Beginning Deferred Fuel	48,262.46	14,725.50	-29,280.94	-160,161.45	-283,518.68	-373,366.83	-448,217.80	-417,802.19	-381,057.39	-308,941.36	-308,941.36	-308,941.36	
Current Month Addition	-33,536.96	-44,006.44	-130,880.51	-123,357.23	-89,848.15	-74,850.97	30,415.61	36,744.80	72,116.04	0.00	0.00	0.00	<b>Vs</b>
Ending Deferred Fuel	14,725.50	-29,280.94	-160,161.45	-283,518.68	-373,366.83	-448,217.80	-417,802.19	-381,057.39	-308,941.36	-308,941.36	-308,941.36	-308,941.36	<b>Ending balance</b>

2010 ACTUAL		FUEL EXPENSE LITRES											
Fuel Expense Litres	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	877	2,229	3,403	-4,220	868	4,286	7,972	4,503	0	35,225	9,310	26,411	90,864
Mayo	73	242	0	0	0	0	3,429	1,138	2,320	413	9	1,724	9,348
Dawson	7,471	1,469	970	48,432	2,000	1,500	2,000	126,131	22,743	1,267	128,709	326,104	668,796
Whitehorse	37,186	11,281	0	0	6,598	4,548	66,162	61,618	10,231	38,548	11,072	413,353	660,597
Total	45,607	15,221	4,373	44,212	9,466	10,334	79,563	193,390	35,294	75,453	149,100	767,592	1,429,605

2010 ACTUAL		DIESEL GENERATION (KW.h)											
Diesel Generation (KW.h)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	5,460	3,780	10,500	6,930	7,352	12,515	8,236	2,520	0	74,670	39,236	100,590	271,789
Mayo	0	672	0	0	48	0	10,185	3,780	10,920	840	0	7,560	34,005
Dawson	27,500	3,168	558	198,842	7,419	2,941	4,871	471,886	74,586	708	479,163	1,132,497	2,404,139
Whitehorse	139,840	34,253	0	1,020	11,256	10,680	268,156	233,120	33,182	94,681	33,718	1,557,388	2,417,294
Total	172,800	41,873	11,058	206,792	26,075	26,136	291,448	711,306	118,688	170,899	552,117	2,798,035	5,127,227

2010 ACTUAL		FUEL EXPENSE DOLLARS											
Fuel Expense Dollars	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	700	1,780	2,718	-3,381	720	3,474	6,462	3,683	0	29,984	7,985	22,972	77,095.90
Mayo	45	151	0	0	0	0	2,134	708	1,444	315	7	1,314	6,117.36
Dawson	6,561	1,290	852	43,303	1,359	1,358	1,801	113,581	20,208	1,126	118,620	309,649	619,706.41
Whitehorse	30,918	9,379	0	0	5,485	3,781	55,268	51,471	8,546	32,200	9,676	369,248	575,972.99
Total	38,224.45	12,599.93	3,569.11	39,921.50	7,564.04	8,612.31	65,664.02	169,442.73	30,197.82	63,624.96	136,288.45	703,183.34	1,278,892.66

2010 ACTUAL		CENTS/LITER											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	79.86	79.86	79.86	80.12	82.90	81.04	81.05	81.78	0.00	85.12	85.77	86.98	84.85
Mayo	62.22	62.23	0.00	0.00	0.00	0.00	62.23	62.22	62.23	76.23	76.22	76.23	65.44
Dawson	87.82	87.82	87.79	89.41	67.95	90.50	90.05	90.05	88.85	88.85	92.16	94.95	92.66
Whitehorse	83.14	83.14	0.00	0.00	83.14	83.14	83.53	83.53	83.54	83.53	87.39	89.33	87.19
Total	83.81	82.78	81.62	90.30	79.91	83.34	82.53	87.62	85.56	84.32	91.41	91.61	89.46

2010 ACTUAL		EFFICIENCY											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	6.23	1.70	3.09	-1.64	8.47	2.92	1.03	0.56	0.00	2.12	4.21	3.81	2.99
Mayo	0.00	2.78	0.00	0.00	0.00	0.00	2.97	3.32	4.71	2.03	0.00	4.39	3.64
Dawson	3.68	2.16	0.58	4.11	3.71	1.96	2.44	3.74	3.28	0.56	3.72	3.47	3.59
Whitehorse	3.76	3.04	0.00	0.00	1.71	2.35	4.05	3.78	3.24	2.46	3.05	3.77	3.66
Total	3.79	2.75	2.53	4.68	2.75	2.53	3.66	3.68	3.36	2.26	3.70	3.65	3.59

2010 ACTUAL		FUEL EXPENSE LITRES YTD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	877	3,106	6,509	2,289	3,157	7,443	15,415	19,918	19,918	55,143	64,453	90,864	
Mayo	73	315	315	315	315	315	3,744	4,882	7,202	7,615	7,624	9,348	
Dawson	7,471	8,940	9,910	58,342	60,342	61,842	63,842	189,973	212,716	213,983	342,692	668,796	
Whitehorse	37,186	48,467	48,467	48,467	55,065	59,613	125,775	187,393	197,624	236,172	247,244	660,597	
Total	45,607	60,828	65,201	109,413	118,878	129,212	208,775	402,165	437,459	512,912	662,013	1,429,605	

2010 ACTUAL		GENERATION (KW.h) YTD											
ACTUAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	5,460	9,240	19,740	26,670	34,022	46,537	54,773	57,293	57,293	131,963	171,199	271,789	
Mayo	0	672	672	672	720	720	10,905	14,685	25,605	26,445	26,445	34,005	
Dawson	27,500	30,668	31,226	230,068	237,487	240,428	245,299	717,185	791,771	792,479	1,271,642	2,404,139	
Whitehorse	139,840	174,093	174,093	175,113	186,369	197,049	465,205	698,325	731,507	826,188	859,906	2,417,294	
Total	172,800	214,673	225,731	432,523	458,598	484,734	776,182	1,487,488	1,606,176	1,777,075	2,329,192	5,127,227	

2010 ACTUAL		DOLLARS YTD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	700.36	2,480.41	5,198.00	1,816.67	2,536.23	6,009.80	12,471.43	16,154.18	16,154.18	46,138.39	54,123.42	77,095.90	
Mayo	45.42	196.01	196.01	196.01	196.01	196.01	2,329.72	3,037.84	4,481.47	4,796.30	4,803.16	6,117.36	
Dawson	6,560.78	7,850.81	8,702.33	52,005.16	53,364.18	54,721.68	56,522.68	170,103.65	190,311.36	191,437.12	310,057.28	619,706.41	
Whitehorse	30,917.89	40,297.15	40,297.15	40,297.15	45,782.61	49,563.85	104,831.53	156,302.42	164,848.90	197,049.06	206,725.46	575,972.99	
Total	38,224.45	50,824.38	54,393.49	94,314.99	101,879.03	110,491.34	176,155.36	345,598.09	375,795.91	439,420.87	575,709.32	1,278,892.66	

2010 ACTUAL		CENTS/LITER YTD											
ACTUAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	79.86	79.86	79.86	79.37	80.34	80.75	80.91	81.10	81.10	83.67	83.97	84.85	
Mayo	62.22	62.23	62.23	62.23	62.23	62.23	62.23	62.23	62.23	62.98	63.00	65.44	
Dawson	87.82	87.82	87.81	89.14	88.44	88.49	88.54	88.54	89.47	89.48	90.48	92.66	
Whitehorse	83.14	83.14	83.14	83.14	83.14	83.14	83.35	83.41	83.42	83.43	83.61	87.19	
Total	83.81	83.55	83.42	86.20	85.70	85.51	84.38	85.93	85.90	85.67	86.96	89.46	

2010 ACTUAL	EFFICIENCY YTD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Faro	6.23	2.97	3.03	11.65	10.78	6.25	3.55	2.88	2.88	2.39	2.66	2.99
Mayo	0.00	2.13	2.13	2.13	2.29	2.29	2.91	3.01	3.56	3.47	3.47	3.64
Dawson	3.68	3.43	3.15	3.94	3.94	3.89	3.84	3.78	3.72	3.70	3.71	3.59
Whitehorse	3.76	3.59	3.59	3.61	3.38	3.31	3.70	3.73	3.70	3.50	3.48	3.66
<b>Total</b>	<b>3.79</b>	<b>3.53</b>	<b>3.46</b>	<b>3.95</b>	<b>3.86</b>	<b>3.75</b>	<b>3.72</b>	<b>3.70</b>	<b>3.67</b>	<b>3.46</b>	<b>3.52</b>	<b>3.59</b>

**FUEL PRICE VARIANCES**

FARO	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Month Generation	5,460.00	3,780.00	10,500.00	6,930.00	7,352.00	12,515.00	8,236.00	2,520.00	0.00	74,670.00	39,236.00	100,590.00
Month Forecast Eff.	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42
<b>Forecast Price</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>
Actual Price	0.7986	0.7986	0.7986	0.8012	0.8290	0.8104	0.8105	0.8178	0.0000	0.8512	0.8577	0.8698
YTD Generation	5,460.00	9,240.00	19,740.00	26,670.00	34,022.00	46,537.00	54,773.00	57,293.00	57,293.00	131,963.00	171,199.00	271,789.00
YTD Forecast Eff.	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42
Forecast Price	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920
Actual Price	0.80	0.80	0.80	0.79	0.80	0.81	0.81	0.81	0.81	0.84	0.84	0.85
Monthly Price Variance	308.78	213.77	593.81	386.57	350.43	664.37	436.99	128.33	0.00	3,073.71	1,540.95	3,593.97
Cumulative	308.78	522.55	1,116.36	1,502.93	1,853.36	2,517.73	2,954.72	3,083.05	3,083.05	6,156.76	7,697.71	11,291.68
Cumulative YTD price variance	308.78	522.56	1,116.37	1,546.22	1,876.00	2,511.03	2,929.95	3,031.46	3,031.46	5,992.07	7,621.99	11,405.79
Cumulative adjustment	0.00	0.01	0.01	43.29	22.64	-6.70	-24.77	-51.59	-51.59	-164.69	-75.72	114.11
Current Month adjustment		0.00	0.00	43.28	-20.65	-29.35	-18.07	-26.81	0.00	-113.10	88.98	189.83
<b>Adjusted Monthly Price Variance</b>	<b>308.78</b>	<b>213.77</b>	<b>593.81</b>	<b>429.85</b>	<b>329.78</b>	<b>635.02</b>	<b>418.92</b>	<b>101.52</b>	<b>0.00</b>	<b>2,960.61</b>	<b>1,629.93</b>	<b>3,783.80</b>

MAYO	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Month Generation	0	672	0	0	48	0	10,185	3,780	10,920	840	0	7,560
Month Forecast Eff.	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51
<b>Forecast Price</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>
Actual Price	0.6222	0.6223	0.0000	0.0000	0.0000	0.0000	0.6223	0.6222	0.6223	0.7623	0.7622	0.7623
YTD Generation	0	672	672	672	720	720	10,905	14,685	25,605	26,445	26,445	34,005
YTD Forecast Eff.	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51
Forecast Price	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670
Actual Price	0.6222	0.6223	0.6223	0.6223	0.6223	0.6223	0.6223	0.6223	0.6223	0.6298	0.6300	0.6544
Monthly Price Variance	0.00	66.00	0.00	0.00	13.22	0.00	1,000.35	371.27	1,072.54	48.99	0.00	440.90
Cumulative	0.00	66.00	66.00	66.00	79.22	79.22	1,079.57	1,450.84	2,523.38	2,572.37	2,572.37	3,013.27
Cumulative YTD price variance	0.00	66.00	66.00	66.00	70.72	70.72	1,071.07	1,442.34	2,514.88	2,540.16	2,538.98	3,028.45
Cumulative adjustment	0.00	0.00	0.00	0.00	-8.50	-8.50	-8.50	-8.50	-8.50	-32.21	-33.39	15.18
Current Month adjustment		0.00	0.00	0.00	-8.51	0.00	0.00	-0.00	0.00	-23.71	-1.18	48.57
<b>Adjusted Monthly Price Variance</b>	<b>0.00</b>	<b>66.00</b>	<b>0.00</b>	<b>0.00</b>	<b>4.71</b>	<b>0.00</b>	<b>1,000.35</b>	<b>371.27</b>	<b>1,072.54</b>	<b>25.28</b>	<b>-1.18</b>	<b>489.47</b>

DAWSON	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Month Generation	27,500	3,168	558	198,842	7,419	2,941	4,871	471,886	74,586	708	479,163	1,132,497
Month Forecast Eff.	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51
<b>Forecast Price</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>
Actual Price	0.8782	0.8782	0.8779	0.8941	0.6795	0.9050	0.9005	0.9005	0.8885	0.8885	0.9216	0.9495
YTD Generation	27,500	30,668	31,226	230,068	237,487	240,428	245,299	717,185	791,771	792,479	1,271,642	2,404,139
YTD Forecast Eff.	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51
Forecast Price	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750
Actual Price	0.8782	0.8782	0.8781	0.8914	0.8844	0.8849	0.8854	0.8954	0.8947	0.8946	0.9048	0.9266
Monthly Price Variance	758.67	87.40	15.44	4,583.26	624.57	58.65	103.39	10,015.81	1,837.57	17.44	7,287.77	8,214.30
Cumulative	758.67	846.07	861.51	5,444.77	6,069.34	6,127.99	6,231.38	16,247.19	18,084.76	18,102.20	25,389.97	33,604.27
Cumulative YTD price variance	758.67	846.06	861.73	5,480.69	6,132.57	6,174.22	6,265.08	16,262.40	18,119.72	18,144.15	25,443.88	33,151.05
Cumulative adjustment	-0.00	-0.01	0.22	35.92	63.23	46.23	33.70	15.21	34.96	41.95	53.91	-453.22
Current Month adjustment		-0.01	0.22	35.70	27.31	-16.99	-12.54	-18.48	19.75	6.98	11.96	-507.13
<b>Adjusted Monthly Price Variance</b>	<b>758.67</b>	<b>87.39</b>	<b>15.66</b>	<b>4,618.96</b>	<b>651.88</b>	<b>41.66</b>	<b>90.85</b>	<b>9,997.33</b>	<b>1,857.32</b>	<b>24.42</b>	<b>7,299.73</b>	<b>7,707.17</b>

WHITEHORSE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Month Generation	139,840	34,253	0	1,020	11,256	10,680	268,156	233,120	33,182	94,681	33,718	1,557,388
Month Forecast Eff.	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34
<b>Forecast Price</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>
Actual Price	0.8314	0.8314	0.0000	0.0000	0.8314	0.8314	0.8353	0.8353	0.8354	0.8353	0.8739	0.8933
YTD Generation	139,840	174,093	174,093	175,113	186,369	197,049	465,205	698,325	731,507	826,188	859,906	2,417,294
YTD Forecast Eff.	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34
Forecast Price	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Actual Price	0.8314	0.8314	0.8314	0.8314	0.8314	0.8314	0.8335	0.8341	0.8342	0.8343	0.8361	0.8719
Monthly Price Variance	5,382.63	1,318.63	0.00	293.17	433.27	411.19	10,008.58	8,702.05	1,238.35	3,534.20	868.87	31,101.93
Cumulative	5,382.63	6,701.26	6,701.26	6,994.43	7,427.70	7,838.89	17,847.47	26,549.52	27,787.87	31,322.07	32,190.94	63,292.87
Cumulative YTD price variance	5,382.63	6,701.29	6,701.29	6,740.55	7,173.82	7,585.05	17,621.04	26,325.02	27,561.60	31,081.73	31,893.81	63,763.08
Cumulative adjustment	-0.00	0.03	0.03	-253.88	-253.88	-253.84	-226.43	-224.50	-226.27	-240.34	-297.13	470.21
Current Month adjustment	-0.00	0.03	0.00	-253.91	-0.00	0.03	27.42	1.93	-1.77	-14.08	-56.78	767.33
<b>Adjusted Monthly Price Variance</b>	<b>5,382.63</b>	<b>1,318.66</b>	<b>0.00</b>	<b>39.26</b>	<b>433.27</b>	<b>411.22</b>	<b>10,036.00</b>	<b>8,703.98</b>	<b>1,236.58</b>	<b>3,520.12</b>	<b>812.09</b>	<b>31,869.26</b>

PRICE VARIANCE SUMMARY													
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro - (962010)	308.78	213.77	593.81	429.85	329.78	635.02	418.92	101.52	0.00	2,960.61	1,629.93	3,783.80	11,405.79
Mayo - (962030)	0.00	66.00	0.00	0.00	4.71	0.00	1,000.35	371.27	1,072.54	25.28	-1.18	489.47	3,028.45
Dawson - (962020)	758.67	87.39	15.66	4,618.96	651.88	41.66	90.85	9,997.33	1,857.32	24.42	7,299.73	7,707.17	33,151.05
Whitehorse - (962070)	5,382.63	1,318.66	0.00	39.26	433.27	411.22	10,036.00	8,703.98	1,236.58	3,520.12	812.09	31,869.26	63,763.08
<b>Total</b>	<b>6,450.08</b>	<b>1,685.83</b>	<b>609.48</b>	<b>5,088.08</b>	<b>1,419.64</b>	<b>1,087.90</b>	<b>11,546.12</b>	<b>19,174.09</b>	<b>4,166.44</b>	<b>6,530.43</b>	<b>9,740.57</b>	<b>43,849.70</b>	<b>111,348.37</b>

Cumulative Deferred Fuel	6,450.08	8,135.91	8,745.39	13,833.47	15,253.11	16,341.01	27,887.13	47,061.22	51,227.67	57,758.10	67,498.67	111,348.37
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DEFERRED FUEL EXPENSE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
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**YEC:**

Rider F Collection:													
CIS	-11,823.41	-10,051.53	-9,138.03	-9,179.07	-8,748.26	-11,551.40	-1,205.11	-2,564.82	-2,844.91	-2,468.70	-2,349.06	-2,478.63	(74,402.93)
RS 32	-9,968.88	-10,745.76	-12,814.88	-9,410.22	-7,762.50	-6,411.06	-5,049.70	-4,249.40	-2,537.55	0.00	0.00	0.00	(68,949.95)
Industrial	-7,642.15	-7,731.36	-9,337.10	-7,404.29	-8,207.14	-6,214.82	-2,033.64	-2,305.80	-2,313.36	-2,048.76	-3,269.92	-4,632.60	(63,140.94)
	-29,434.44	-28,528.65	-31,290.01	-25,993.58	-24,717.90	-24,177.28	-8,288.45	-9,120.02	-7,695.82	-4,517.46	-5,618.98	-7,111.23	-206,493.82
Fuel Variance	6,450.08	1,685.83	609.48	5,088.08	1,419.64	1,087.90	11,546.12	19,174.09	4,166.44	6,530.43	9,740.57	43,849.70	<b>111,348.37</b>
Rider F Collection	-29,434.44	-28,528.65	-31,290.01	-25,993.58	-24,717.90	-24,177.28	-8,288.45	-9,120.02	-7,695.82	-4,517.46	-5,618.98	-7,111.23	-206,493.82
Over/(Under) Collection	-22,984.36	-26,842.82	-30,680.53	-20,905.50	-23,298.26	-23,089.38	3,257.67	10,054.07	-3,529.38	2,012.97	4,121.59	36,738.47	-95,145.45
Transfer to/from YECL	19,833.83	26,842.82	30,680.53	20,905.53	23,298.26	23,089.38	0.00	0.00	1,036.59	-921.89	-2,200.53	-9,853.68	132,710.84
Net Over/(Under) Collection	-3,150.53	0.00	-0.00	0.03	0.00	0.00	3,257.67	10,054.07	-2,492.79	1,091.08	1,921.06	26,884.79	<b>37,565.39</b>
													<b>Net Change</b>
Beginning Deferred Fuel Price Adjustment	0.00	-3,150.53	-3,150.53	-3,150.53	-3,150.50	-3,150.50	-3,150.50	107.17	10,161.24	7,668.46	8,759.54	10,680.60	
Current Month Addition	-3,150.53	0.00	-0.00	0.03	0.00	0.00	3,257.67	10,054.07	-2,492.79	1,091.08	1,921.06	26,884.79	<b>Vs</b>
Ending Deferred Fuel Price Adjustment	-3,150.53	-3,150.53	-3,150.53	-3,150.50	-3,150.50	-3,150.50	107.17	10,161.24	7,668.46	8,759.54	10,680.60	<b>37,565.39</b>	<b>Ending balance</b>

**YECL:**

Fuel Variance	52,671	66,639	52,622	44,754	46,294	48,878	50,449	49,234	43,870.00	29,792.00	14,004.00	-10,429.00	488,778.00
Rider F Collection	-114,166.00	-90,090.00	-85,982.00	-87,488.00	-74,918.00	-71,708.00	-17,329.00	-16,882.00	-17,725.00	-19,819.00	-22,202.00	-24,105.00	-642,414.00
Over/(Under) Collection	-61,495.00	-23,451.00	-33,360.00	-42,734.00	-28,624.00	-22,830.00	33,120.00	32,352.00	26,145.00	9,973.00	-8,198.00	-34,536.00	-153,638.00
Transfer to/from YEC	-19,833.83	-26,842.82	-30,680.53	-20,905.53	-23,298.26	-23,089.38	0.00	0.00	-1,036.59	921.89	2,200.53	9,853.68	-132,710.84
Net Over/(Under) Collection	-81,328.83	-50,293.82	-64,040.53	-63,639.53	-51,922.26	-45,919.38	33,120.00	32,352.00	25,108.41	10,894.89	-5,997.47	-24,682.32	<b>-286,348.84</b>
													<b>Net Change</b>
Beginning Deferred Fuel	297,045.91	215,717.08	165,423.26	101,382.73	37,743.20	-14,179.06	-60,098.44	-26,978.44	5,373.56	30,481.97	41,376.86	35,379.39	
Current Month Addition	-81,328.83	-50,293.82	-64,040.53	-63,639.53	-51,922.26	-45,919.38	33,120.00	32,352.00	25,108.41	10,894.89	-5,997.47	-24,682.32	<b>Vs</b>
Ending Deferred Fuel	215,717.08	165,423.26	101,382.73	37,743.20	-14,179.06	-60,098.44	-26,978.44	5,373.56	30,481.97	41,376.86	35,379.39	<b>10,697.07</b>	<b>Ending balance</b>

**Combined:**

(Both Companies)													
Fuel Variance	59,121	68,325	53,231	49,842	47,714	49,966	61,995	68,408	48,036	36,322	23,745	33,421	600,126.37
Rider F Collection	-143,600.44	-118,618.65	-117,272.01	-113,481.58	-99,635.90	-95,885.28	-25,617.45	-26,002.02	-25,420.82	-24,336.46	-27,820.98	-31,216.23	-848,907.82
Over/(Under) Collection	-84,479.36	-50,293.82	-64,040.53	-63,639.50	-51,922.26	-45,919.38	36,377.67	42,406.07	22,615.62	11,985.97	-4,076.41	2,202.47	-248,783.45
Transfer to/from YEC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Over/(Under) Collection	-84,479.36	-50,293.82	-64,040.53	-63,639.50	-51,922.26	-45,919.38	36,377.67	42,406.07	22,615.62	11,985.97	-4,076.41	2,202.47	<b>-248,783.45</b>
													<b>Net Change</b>
Beginning Deferred Fuel	297,045.91	212,566.55	162,272.73	98,232.19	34,592.70	-17,329.56	-63,248.94	-26,871.27	15,534.80	38,150.42	50,136.39	46,059.98	
Current Month Addition	-84,479.36	-50,293.82	-64,040.53	-63,639.50	-51,922.26	-45,919.38	36,377.67	42,406.07	22,615.62	11,985.97	-4,076.41	2,202.47	<b>Vs</b>
Ending Deferred Fuel	212,566.55	162,272.73	98,232.19	34,592.70	-17,329.56	-63,248.94	-26,871.27	15,534.80	38,150.42	50,136.39	46,059.98	<b>48,262.46</b>	<b>Ending balance</b>

2009 ACTUAL		FUEL EXPENSE LITRES											
Fuel Expense Litres	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	8,431	1,303	218	9,940	9,494	2,504	3,667	54,886	393	21,047	3,933	204	116,020
Mayo	0	163	51	0	0	137	0	0	306	141	0	0	798
Dawson	20,867	8,100	1,471	-1,295	205	625	6,675	2,390	78,793	18,332	650	990	137,803
Whitehorse	178,858	24,284	452	3,312	31,656	0	66,690	1,475	21,183	480	15,920	117,150	461,460
Total	208,156	33,850	2,192	11,957	41,355	3,266	77,032	58,751	100,675	40,000	20,503	118,344	716,081

2009 ACTUAL		DIESEL GENERATION (KW.h)											
Diesel Generation (KW.h)	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	36,540	8,400	2,520	31,920	31,290	7,140	9,660	193,620	2,100	78,960	7,980	3,150	413,280
Mayo	0	0	0	0	0	420	0	0	693	0	0	0	1,113
Dawson	76,555	30,681	388	148	1,234	1,087	27,315	5,580	288,420	75,974	373	916	508,671
Whitehorse	664,339	96,304	0	2,880	124,921	0	238,215	4,520	83,453	6,900	57,324	343,023	1,621,879
Total	777,434	135,385	2,908	34,948	157,445	8,647	275,190	203,720	374,666	161,834	65,677	347,089	2,544,943

2009 ACTUAL		FUEL EXPENSE DOLLARS											
Fuel Expense Dollars	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	7,358	1,081	181	8,249	7,879	2,020	2,958	43,722	313	12,596	3,141	163	89,660.34
Mayo	0	102	32	0	0	86	0	0	190	87	0	0	497.46
Dawson	20,287	7,875	1,430	-1,169	184	566	6,011	2,152	70,872	16,036	569	866	125,678.59
Whitehorse	144,232	19,403	359	2,553	24,206	0	52,030	1,135	16,636	377	12,508	86,574	360,012.70
Total	171,877.08	28,461.11	2,001.45	9,632.66	32,268.36	2,670.92	60,998.32	47,009.16	88,011.62	29,097.13	16,217.91	87,603.37	575,849.09

2009 ACTUAL		CENTS/LITER											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	87.28	82.99	82.99	82.99	82.99	80.65	80.65	79.66	79.66	59.85	79.86	79.86	77.28
Mayo	0.00	62.56	62.55	0.00	0.00	62.56	0.00	0.00	62.23	62.04	0.00	0.00	62.34
Dawson	97.22	97.22	97.22	90.26	89.61	90.50	90.05	90.05	89.95	87.48	87.48	87.48	91.20
Whitehorse	80.64	79.90	79.32	77.07	76.47	0.00	78.02	76.95	78.53	78.61	78.57	73.90	78.02
Total	82.57	84.08	91.31	80.56	78.03	81.78	79.19	80.01	87.42	72.74	79.10	74.02	80.42

2009 ACTUAL		EFFICIENCY											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro	4.33	6.45	11.56	3.21	3.30	2.85	2.63	3.53	5.34	3.75	2.03	15.44	3.56
Mayo	0.00	0.00	0.00	0.00	0.00	3.07	0.00	0.00	2.26	0.00	0.00	0.00	1.39
Dawson	3.67	3.79	0.26	-0.11	6.02	1.74	4.09	2.33	3.66	4.14	0.57	0.93	3.69
Whitehorse	3.71	3.97	0.00	0.87	3.95	0.00	3.57	3.06	3.94	14.38	3.60	2.93	3.51
Total	3.73	4.00	1.33	2.92	3.81	2.65	3.57	3.47	3.72	4.05	3.20	2.93	3.55

2009 ACTUAL		FUEL EXPENSE LITRES YTD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Faro	8,431	9,734	9,952	19,892	29,386	31,890	35,557	90,443	90,836	111,883	115,816	116,020	
Mayo	0	163	214	214	214	351	351	351	657	798	798	798	
Dawson	20,867	28,967	30,438	29,143	29,348	29,973	36,648	39,038	117,831	136,163	136,813	137,803	
Whitehorse	178,858	203,142	203,594	206,906	238,562	238,562	305,252	306,727	327,910	328,390	344,310	461,460	
Total	208,156	242,006	244,198	256,155	297,510	300,776	377,808	436,559	537,234	577,234	597,737	716,081	

2009 ACTUAL		GENERATION (KW.h) YTD											
ACTUAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Faro	36,540	44,940	47,460	79,380	110,670	117,810	127,470	321,090	323,190	402,150	410,130	413,280	
Mayo	0	0	0	0	0	420	420	420	1,113	1,113	1,113	1,113	
Dawson	76,555	107,236	107,624	107,772	109,006	110,093	137,408	142,988	431,408	507,382	507,755	508,671	
Whitehorse	664,339	760,643	760,643	763,523	888,444	888,444	1,126,659	1,131,179	1,214,632	1,221,532	1,278,856	1,621,879	
Total	777,434	912,819	915,727	950,675	1,108,120	1,116,767	1,391,957	1,595,677	1,970,343	2,132,177	2,197,854	2,544,943	

2009 ACTUAL		DOLLARS YTD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Faro	7,358.23	8,439.55	8,620.46	16,869.33	24,748.07	26,767.65	29,725.25	73,447.27	73,760.33	86,356.58	89,497.43	89,660.34	
Mayo	0.00	101.97	133.87	133.87	133.87	219.58	219.58	219.58	409.99	497.46	497.46	497.46	
Dawson	20,287.14	28,162.06	29,592.18	28,423.27	28,606.98	29,172.61	35,183.45	37,335.65	108,207.92	124,243.99	124,812.58	125,678.59	
Whitehorse	144,231.71	163,634.61	163,993.13	166,545.83	190,751.74	190,751.74	242,781.62	243,916.56	260,552.44	260,929.78	273,438.25	360,012.70	
Total	171,877.08	200,338.19	202,339.64	211,972.30	244,240.66	246,911.58	307,909.90	354,919.06	442,930.68	472,027.81	488,245.72	575,849.09	

2009 ACTUAL		CENTS/LITER YTD											
ACTUAL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Faro	87.28	86.70	86.62	84.80	84.22	83.94	83.60	81.21	81.20	77.18	77.28	77.28	
Mayo	0.00	62.56	62.56	62.56	62.56	62.56	62.56	62.56	62.40	62.34	62.34	62.34	
Dawson	97.22	97.22	97.22	97.53	97.48	97.33	96.00	95.64	91.83	91.25	91.23	91.20	
Whitehorse	80.64	80.55	80.55	80.49	79.96	79.96	79.53	79.52	79.46	79.46	79.42	78.02	
Total	82.57	82.78	82.86	82.75	82.09	82.09	81.50	81.30	82.45	81.77	81.68	80.42	

2009 ACTUAL		EFFICIENCY YTD											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Faro	4.33	4.62	4.77	3.99	3.77	3.69	3.58	3.55	3.56	3.59	3.54	3.56	
Mayo	0.00	0.00	0.00	0.00	0.00	1.20	1.20	1.20	1.69	1.39	1.39	1.39	
Dawson	3.67	3.70	3.54	3.70	3.71	3.67	3.75	3.66	3.66	3.73	3.71	3.69	
Whitehorse	3.71	3.74	3.74	3.69	3.72	3.72	3.69	3.69	3.70	3.72	3.71	3.51	
Total	3.73	3.77	3.75	3.71	3.72	3.71	3.68	3.66	3.67	3.69	3.68	3.55	

FUEL PRICE VARIANCES													
FARO	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Month Generation	36,540.00	8,400.00	2,520.00	31,920.00	31,290.00	7,140.00	9,660.00	193,620.00	2,100.00	78,960.00	7,980.00	3,150.00	
Month Forecast Eff.	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	
<b>Forecast Price</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	<b>0.9920</b>	
Actual Price	0.8728	0.8299	0.8299	0.8299	0.8299	0.8065	0.8065	0.7966	0.7966	0.5985	0.7986	0.7986	
YTD Generation	36,540.00	44,940.00	47,460.00	79,380.00	110,670.00	117,810.00	127,470.00	321,090.00	323,190.00	402,150.00	410,130.00	413,280.00	
YTD Forecast Eff.	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	
Forecast Price	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920	
Actual Price	0.87	0.87	0.87	0.85	0.84	0.84	0.84	0.81	0.81	0.77	0.77	0.77	
Monthly Price Variance	1,274.00	398.22	119.47	1,513.25	1,483.39	387.19	523.83	11,062.56	119.99	9,085.43	451.29	178.15	
Cumulative	1,274.00	1,672.22	1,791.69	3,304.94	4,788.33	5,175.52	5,699.35	16,761.91	16,881.90	25,967.33	26,418.62	26,596.77	
Cumulative YTD price variance	1,274.00	1,642.31	1,745.70	3,341.25	4,848.38	5,257.55	5,814.84	16,891.63	17,008.44	25,887.27	26,292.05	26,488.50	
Cumulative adjustment	-0.00	-29.91	-45.99	36.31	60.05	82.03	115.49	129.72	126.54	-80.06	-126.57	-108.27	
Current Month adjustment		-29.91	-16.08	82.30	23.74	21.98	33.46	14.23	-3.18	-206.61	-46.50	18.30	
<b>Adjusted Monthly Price Variance</b>	<b>1,274.00</b>	<b>368.31</b>	<b>103.39</b>	<b>1,595.55</b>	<b>1,507.13</b>	<b>409.17</b>	<b>557.29</b>	<b>11,076.79</b>	<b>116.81</b>	<b>8,878.82</b>	<b>404.79</b>	<b>196.45</b>	
MAYO	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Month Generation	0	0	0	0	0	420	0	0	693	0	0	0	
Month Forecast Eff.	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	
<b>Forecast Price</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	<b>0.9670</b>	
Actual Price	0.0000	0.6256	0.6255	0.0000	0.0000	0.6256	0.0000	0.0000	0.6223	0.6204	0.0000	0.0000	
YTD Generation	0	0	0	0	0	420	420	420	1,113	1,113	1,113	1,113	
YTD Forecast Eff.	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	
Forecast Price	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	0.9670	
Actual Price	0.0000	0.6256	0.6256	0.6256	0.6256	0.6256	0.6256	0.6256	0.6240	0.6234	0.6234	0.6234	
Monthly Price Variance	0.00	0.00	0.00	0.00	0.00	40.85	0.00	0.00	68.07	0.00	0.00	0.00	
Cumulative	0.00	0.00	0.00	0.00	0.00	40.85	40.85	40.85	108.92	108.92	108.92	108.92	
Cumulative YTD price variance	0.00	0.00	0.00	0.00	0.00	40.85	40.85	40.85	108.75	108.96	108.96	108.96	
Cumulative adjustment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.17	0.04	0.04	0.04	
Current Month adjustment		0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.17	0.21	0.00	0.00	
<b>Adjusted Monthly Price Variance</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>40.85</b>	<b>0.00</b>	<b>0.00</b>	<b>67.90</b>	<b>0.21</b>	<b>0.00</b>	<b>0.00</b>	
DAWSON	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Month Generation	76,555	30,681	388	148	1,234	1,087	27,315	5,580	288,420	75,974	373	916	
Month Forecast Eff.	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	
<b>Forecast Price</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	<b>0.9750</b>	
Actual Price	0.9722	0.9722	0.9722	0.9026	0.8961	0.9050	0.9005	0.9005	0.8995	0.8748	0.8748	0.8748	
YTD Generation	76,555	107,236	107,624	107,772	109,006	110,093	137,408	142,988	431,408	507,382	507,755	508,671	
YTD Forecast Eff.	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	
Forecast Price	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	0.9750	
Actual Price	0.9722	0.9722	0.9722	0.9753	0.9748	0.9733	0.9600	0.9564	0.9183	0.9125	0.9123	0.9120	
Monthly Price Variance	60.82	24.37	0.31	3.05	27.72	21.68	579.76	118.43	6,206.03	2,169.73	10.65	26.16	
Cumulative	60.82	85.19	85.50	88.55	116.27	137.95	717.71	836.14	7,042.17	9,211.90	9,222.55	9,248.71	
Cumulative YTD price variance	60.82	85.18	85.49	-9.32	7.75	53.44	585.75	758.02	6,965.03	9,039.62	9,072.18	9,127.62	
Cumulative adjustment	-0.00	-0.01	-0.01	-97.87	-108.52	-84.51	-131.96	-78.12	-77.14	-172.28	-150.37	-121.09	
Current Month adjustment		-0.00	0.00	-97.86	-10.66	24.01	-47.45	53.84	0.98	-95.14	21.91	29.28	
<b>Adjusted Monthly Price Variance</b>	<b>60.82</b>	<b>24.37</b>	<b>0.31</b>	<b>-94.81</b>	<b>17.06</b>	<b>45.69</b>	<b>532.31</b>	<b>172.27</b>	<b>6,207.01</b>	<b>2,074.59</b>	<b>32.56</b>	<b>55.44</b>	
WHITEHORSE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Month Generation	664,339	96,304	0	2,880	124,921	0	238,215	4,520	83,453	6,900	57,324	343,023	
Month Forecast Eff.	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	
<b>Forecast Price</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	<b>0.9600</b>	
Actual Price	0.8064	0.7990	0.7932	0.7707	0.7647	0.0000	0.7802	0.7695	0.7853	0.7861	0.7857	0.7390	
YTD Generation	664,339	760,643	760,643	763,523	888,444	888,444	1,126,659	1,131,179	1,214,632	1,221,532	1,278,856	1,621,879	
YTD Forecast Eff.	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	3.34	
Forecast Price	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	
Actual Price	0.8064	0.8055	0.8055	0.8049	0.7996	0.7996	0.7953	0.7952	0.7946	0.7946	0.7942	0.7802	
Monthly Price Variance	30,550.95	4,642.22	0.00	163.19	7,306.21	0.00	12,825.44	257.87	4,364.02	359.20	2,991.35	22,696.50	
Cumulative	30,550.95	35,193.17	35,193.17	35,356.36	42,662.57	42,662.57	55,488.01	55,745.88	60,109.90	60,469.10	63,460.45	86,156.95	
Cumulative YTD price variance	30,550.95	35,181.25	35,187.49	35,447.87	42,669.31	42,669.31	55,540.86	55,805.86	60,155.11	60,501.36	63,497.51	87,328.89	
Cumulative adjustment	-0.00	-11.92	-5.68	91.51	6.74	6.74	52.85	59.98	45.21	32.26	37.06	1,171.94	
Current Month adjustment		-11.92	6.24	97.19	-84.77	0.00	46.11	7.13	-14.76	-12.95	4.80	1,134.88	
<b>Adjusted Monthly Price Variance</b>	<b>30,550.95</b>	<b>4,630.30</b>	<b>6.24</b>	<b>260.38</b>	<b>7,221.44</b>	<b>0.00</b>	<b>12,871.55</b>	<b>265.00</b>	<b>4,349.26</b>	<b>346.25</b>	<b>2,996.15</b>	<b>23,831.38</b>	
PRICE VARIANCE SUMMARY													
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Faro - (962010)	1,274.00	368.31	103.39	1,595.55	1,507.13	409.17	557.29	11,076.79	116.81	8,878.82	404.79	196.45	26,488.50
Mayo - (962030)	0.00	0.00	0.00	0.00	0.00	40.85	0.00	0.00	67.90	0.21	0.00	0.00	108.96
Dawson - (962020)	60.82	24.37	0.31	-94.81	17.06	45.69	532.31	172.27	6,207.01	2,074.59	32.56	55.44	9,127.63
Whitehorse - (962070)	30,550.95	4,630.30	6.24	260.38	7,221.44	0.00	12,871.55	265.00	4,349.26	346.25	2,996.15	23,831.38	87,328.89
<b>Total</b>	<b>31,885.77</b>	<b>5,022.98</b>	<b>109.93</b>	<b>1,761.12</b>	<b>8,745.63</b>	<b>495.72</b>	<b>13,961.16</b>	<b>11,514.06</b>	<b>10,740.97</b>	<b>11,299.87</b>	<b>3,433.50</b>	<b>24,083.26</b>	<b>123,053.98</b>
Cumulative Deferred Fuel	31,885.77	36,908.75	37,018.69	38,779.81	47,525.44	48,021.15	61,982.31	73,496.37	84,237.34	95,537.21	98,970.71	123,053.98	

Diesel Fuel Prive Variance Account	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>YEC:</b>													
<b>Rider F Collection:</b>													
CIS	55,154.19	50,612.88	(252.92)	(106.13)	(29.17)	1,656.22	(0.78)	(0.35)	0.00	0.00	0.00	-9,070.49	97,963.45
RS 32	3,195.18	11,996.88	10,863.30	-16,223.40	-14,034.33	-10,683.45	-15,654.40	-11,204.80	-18,831.36	-19,350.98	-22,278.63	-20,377.50	-122,583.49
Industrial	16,505.64	15,283.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-16,749.18	0.00	-10,734.70	4,304.86
	74,855.01	77,892.86	10,610.38	-16,329.53	-14,063.50	-9,027.23	-15,655.18	-11,205.15	-18,831.36	-36,100.16	-22,278.63	-40,182.69	-20,315.18
Fuel Variance	31,885.77	5,022.98	109.93	1,761.12	8,745.63	495.72	13,961.16	11,514.06	10,740.97	11,299.87	3,433.50	24,083.26	123,053.98
Rider F Collection	74,855.01	77,892.86	10,610.38	-16,329.53	-14,063.50	-9,027.23	-15,655.18	-11,205.15	-18,831.36	-36,100.16	-22,278.63	-40,182.69	-20,315.18
Over/(Under) Collection	106,740.78	82,915.84	10,720.31	-14,568.41	-5,317.87	-8,531.51	-1,694.02	308.91	-8,090.39	-24,800.29	-18,845.13	-16,099.43	102,738.80
Transfer to/from YECL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74,279.22	74,279.22
Net Over/(Under) Collection	106,740.78	82,915.84	10,720.31	-14,568.41	-5,317.87	-8,531.51	-1,694.02	308.91	-8,090.39	-24,800.29	-18,845.13	58,179.79	177,018.02
													<b>Net Change</b>
Beginning Deferred Fuel	-177,018.02	-70,277.24	12,638.60	23,358.92	8,790.51	3,472.64	-5,058.88	-6,752.90	-6,443.99	-14,534.38	-39,334.67	-58,179.80	
Current Month Addition	106,740.78	82,915.84	10,720.31	-14,568.41	-5,317.87	-8,531.51	-1,694.02	308.91	-8,090.39	-24,800.29	-18,845.13	58,179.79	<b>Vs</b>
Ending Deferred Fuel	-70,277.24	12,638.60	23,358.92	8,790.51	3,472.64	-5,058.88	-6,752.90	-6,443.99	-14,534.38	-39,334.67	-58,179.80	<b>-0.00</b>	<b>Ending balance</b>
<b>YECL:</b>													
Fuel Variance	(288,374)	(222,968)	(202,644)	(184,506)	(144,937)	80,974	66,148	60,991	63,946.00	65,635.00	56,018.00	65,665.00	-584,052.00
Rider F Collection	635,950.52	493,742.82	-2,805.49	-1,040.47	2,187.90	-288.91	15.28	-34.40	33.76	-155.79	95.56	-97,682.34	1,030,018.44
Over/(Under) Collection	347,576.52	270,774.82	-205,449.49	-185,546.47	-142,749.10	80,685.09	66,163.28	60,956.60	63,979.76	65,479.21	56,113.56	-32,017.34	445,966.44
Transfer to/from YEC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-74,279.22	-74,279.22
Net Over/(Under) Collection	347,576.52	270,774.82	-205,449.49	-185,546.47	-142,749.10	80,685.09	66,163.28	60,956.60	63,979.76	65,479.21	56,113.56	-106,296.56	371,687.22
													<b>Net Change</b>
Beginning Deferred Fuel	-74,641.31	272,935.21	543,710.03	338,260.54	152,714.07	9,964.97	90,650.06	156,813.34	217,769.94	281,749.70	347,228.91	403,342.47	
Current Month Addition	347,576.52	270,774.82	-205,449.49	-185,546.47	-142,749.10	80,685.09	66,163.28	60,956.60	63,979.76	65,479.21	56,113.56	-106,296.56	<b>Vs</b>
Ending Deferred Fuel	272,935.21	543,710.03	338,260.54	152,714.07	9,964.97	90,650.06	156,813.34	217,769.94	281,749.70	347,228.91	403,342.47	<b>297,045.91</b>	<b>Ending balance</b>
<b>Combined:</b>													
<b>(Both Companies)</b>													
Fuel Variance	(256,488)	(217,945)	(202,534)	(182,745)	(136,191)	81,470	80,109	72,505	74,687	76,935	59,451	89,748	-460,998.02
Rider F Collection	710,805.53	571,635.68	7,804.89	-17,370.00	-11,875.60	-9,316.14	-15,639.90	-11,239.55	-18,797.60	-36,255.95	-22,183.07	-137,865.03	1,009,703.26
Over/(Under) Collection	454,317.30	353,690.66	-194,729.18	-200,114.88	-148,066.97	72,153.58	64,469.26	61,265.51	55,889.37	40,678.92	37,268.43	-48,116.77	548,705.24
Transfer to/from YEC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Over/(Under) Collection	454,317.30	353,690.66	-194,729.18	-200,114.88	-148,066.97	72,153.58	64,469.26	61,265.51	55,889.37	40,678.92	37,268.43	-48,116.77	548,705.24
													<b>Net Change</b>
Beginning Deferred Fuel	-251,659.33	202,657.97	556,348.63	361,619.46	161,504.58	13,437.61	85,591.18	150,060.44	211,325.95	267,215.32	307,894.24	345,162.67	
Current Month Addition	454,317.30	353,690.66	-194,729.18	-200,114.88	-148,066.97	72,153.58	64,469.26	61,265.51	55,889.37	40,678.92	37,268.43	-48,116.77	<b>Vs</b>
Ending Deferred Fuel	202,657.97	556,348.63	361,619.46	161,504.58	13,437.61	85,591.18	150,060.44	211,325.95	267,215.32	307,894.24	345,162.67	<b>297,045.91</b>	<b>Ending balance</b>

1 **REFERENCE: IR LE-YEC/YECL-1-4**

2

3 **ISSUE/SUB-ISSUE: Diesel Contingency Fund**

4

5 **QUOTE:**

6

7 ...What would be the impact on the Diesel Contingency Fund (DCF)?

8

9 **PREAMBLE:**

10

11 The Board is interested in how the DFPVA policy was formulated especially in light of  
12 other deferral accounts or funding that that have been approved.

13

14 **QUESTION:**

15

16 a) Please explain the origin and the role of the DCF in respect of mitigating financial  
17 risk to the Companies. Please provide supporting documentation and detail in  
18 your discussion.

19

20 b) In respect of (a) please discuss the approved mechanics, i.e. monthly credits and  
21 debits, associated with the DCF. Please provide supporting documentation, i.e.  
22 findings, reports and decisions in support of your discussions.

23

24 c) In respect of the DCF, how is a long-term hydro generation forecast determined?  
25 Please provide the monthly hydro generation that underpins the 2009 approved  
26 hydro generation forecast.

27

28 d) Using approved hydro generation and diesel generation forecast, YECL (2008  
29 and 2009) and YEC (2008) as a basis, i.e., please provide documentation, i.e.  
30 explanations and schedules (Excel spreadsheet with formulas and links between  
31 cells intact), illustrating the monthly credits and debits that were made to the  
32 DCF. The documentation should delineate instances where:

33

- 34 • Hydro generation is in excess of the approved forecast, and diesel is not  
35 on the margin;

- 1           • Hydro generation is in excess of the approved forecast, and diesel is on  
2           the margin (please proffer an explanation); and  
3  
4           • Hydro generation is below the approved forecast and diesel is on.5

6           The schedules should include columns showing actual and approved monthly  
7           hydro and diesel generation forecasts. Please use the spreadsheet provide by  
8           the Companies in answering YUB-YEC-YECL-2-1(f).  
9

- 10          e) For other than test years, does the last approved hydro generation form the basis  
11          for monthly credits and debits to the DCF? If not, please explain.  
12  
13          f) For the years 2010 and 2011 to date, please redo part (d).  
14  
15          g) In view of the answers provided to parts (d) and (f) above and the forecast risk  
16          mitigated by the DCF, please explain how a DFPVA that fully mitigates a utility's  
17          risk regarding forecast diesel fuel prices and diesel generation volume is  
18          appropriate. Please provide supporting documentation.  
19

20          **ANSWER:**

21  
22          **(a), (b) and (c)**

23  
24          Please see Attachments 1 to 4 to this response for supporting documentation.  
25

26          The Terms of the 1996/97 Negotiated Settlement approved by Board Order 1996-6  
27          provided for the creation of the Diesel Contingency Fund (DCF). The March 11, 1996  
28          letter recording the settlements [provided as Exhibit B-16 in the 2008/2009 GRA] is  
29          provided as Attachment 1 to this response. Historically, the DCF has operated to smooth  
30          customer rate changes and offset forecast diesel cost variances due to variances in  
31          hydro generation capability.  
32

33          The DCF has operated on the same basis as the Low Water Reserve Fund (LWRF)  
34          previously in place from 1991 through 1995, except for the material differences specific  
35          in the 1996/97 Settlement Agreement. (Attachment 2 and 3 to this response provide two

1 letters filed with the Board June 2, 1999 and October 7, 1999 which detail how the fund  
2 is to operate).

3  
4 In summary, the Diesel Contingency Fund (DCF) serves to stabilize Yukon Energy's and  
5 Yukon Electrical's costs to serve firm loads on WAF due to variances in water flows and  
6 consequent variations in hydro generation.

- 7
- 8 • The DCF is intended to offset diesel generation cost changes for the WAF  
9 system that are caused solely by variances from long term average levels of  
10 WAF system hydro and wind generation.
  - 11
  - 12 • In accordance with defined procedures reviewed in Attachment 2 and 3, the DCF  
13 Report sets out both actual and forecast generation numbers for the purpose of  
14 each year's calculations.
  - 15
  - 16 • The forecast generation for hydro and wind reflects the appropriate long term  
17 average levels, as confirmed in the Negotiated Settlement Agreement for the  
18 1996/97 GRA. The forecast diesel generation reflects the forecast generation  
19 requirement to meet the forecast load as set out in the GRA as approved by the  
20 Board. The WAF diesel generation costs per kWh are based on the GRA  
21 forecast (standard efficiency for diesel generation unit use of fuel, YEC average  
22 WAF diesel fuel price forecasts, and variable O&M diesel generation costs per  
23 kWh, each as approved in the GRA).
  - 24

25 The DCF fund operates outside of rate base with annual reporting to the Board to detail  
26 additions and deletions to the fund. The Board directs the Companies on the additions  
27 and deletions to the fund. (Additions/Deletions to the fund were last addressed in Order  
28 1999-3 [provided as Exhibit B-17 in the 2008/2009 GRA] which is provided as  
29 Attachment 4 to this response).

30  
31 The DCF account can be either credited or debited each month for one of two reasons:

- 32
- 33 • **When diesel in “on the margin”** (defined as diesel being used to meet long-  
34 term firm energy requirements of the WAF system, not just periodic peaking  
35 requirements), the account stabilizes the diesel costs related to water flow

1 variations. In these situations (i.e., with diesel “on the margin”), when hydro  
2 varies positive or negative from the long term average forecast, that variance is  
3 met effectively 1 for 1 with changes in diesel generation compared to what would  
4 have occurred had the hydro variance not occurred. This happened, for example,  
5 in the periods of 1996-1998 when the Faro mine was operating, and was last  
6 triggered for January 1998.

7

- 8 • **When diesel is not on the margin**, the account can in certain circumstances be  
9 used to pay for the costs of baseload generation using diesel when such  
10 baseload generation arises due to low water conditions. This has happened, for  
11 example, in a number of months of 1999, when diesel was not considered to be  
12 on the margin (due to low grid load levels hydro should have been able to supply  
13 all base load requirements) but extremely low water led to the need for baseload  
14 diesel generation. In practice, the distinction between normal “peaking” operation  
15 and true baseload diesel has been set at 250 MW.h/month for calculation  
16 purposes<sup>1</sup>.

17

18 Diesel has not been “on the margin” since the Faro mine closed in 1998.

19

20 For examples of DCF operation, please see response to LE-YEC/YECL-1-4 REVISED  
21 and LE-YEC/YECL-1-5 REVISED.

22

23 Long term hydro was determined in the 1996/97 GRA (when the DCF was last reviewed  
24 during a GRA) based on the best information available to the utilities at that time. Diesel  
25 was not forecast to be “on the margin” in the 2009 GRA, as noted in Board Order 2010-  
26 13. No DCF determinations have been made subsequent to the 2009 GRA – and  
27 adjustments to the DCF would be required today to deal with new circumstances that  
28 have emerged since the 1996/97 GRA. Please see response below to (d) and (f).

---

<sup>1</sup> Even in cases where diesel generation exceeded 250 MW.h but the generation was for peaking requirement, the DCF has not been charged – for example, December 2008.

1 (d) and (f)

2  
3 In addition to the response to (a) to (c) above, please see response to LE-YEC/YECL-1-  
4 4 REVISED and LE-YEC/YECL-1-5 REVISED for detailed examples and explanations  
5 regarding how the DCF operates.

6  
7 For an example of how the fund operated historically when diesel was on the margin,  
8 please see Attachment 2 and 3 of YUB-YEC/YECL-2-4(a)-(c). The June 2, 1999 letter  
9 attached provides the following schedules and tables related to the DCF:

- 10
- 11 • Summary of 1996 and 1997 DCF calculation revisions;
  - 12
  - 13 • DCF continuity schedule: January 1, 1996 – December 31, 1998; and
  - 14
  - 15 • Revised 1996 and 1997 as well as final 1998 DCF schedules.
  - 16

17 The Companies are unable to provide current schedules illustrating monthly  
18 credits/debits to the DCF. This is due to the fact that diesel has not been on the margin  
19 since the Faro mine closed and the DCF has not been operative during the years  
20 specified in the question (2008 and following). The following is noted in this regard:

- 21
- 22 • Yukon Energy noted in the 2008/2009 GRA that no use of the DCF was forecast  
23 for the 2008/2009 test years. In this respect, the DCF balance as at December  
24 31, 2007 was \$0.856 million (including interest earned monthly). This balance  
25 has been retained in the fund (with interest) and (beyond interest) no amounts  
26 have been either credited or debited to the fund since December 31, 2007.
  - 27
  - 28 • In the Yukon Energy 2008/2009 GRA filing it was also noted that the DCF would  
29 not be advanced in the “diesel on the margin” mode until such time as the system  
30 has firm loads that exceed the long-term average capability of the system over  
31 the course of a long period (many months to years). Yukon Energy did not  
32 anticipate a requirement for such a fund to be in operation during 2008 and 2009.  
33 Until “diesel is on the margin” the fund cannot be triggered and amounts cannot  
34 be debited or credited to the fund.

1 Yukon Energy on March 29, 2010, filed its 2008 Diesel Contingency Fund Filing and  
2 noted the potential need to update methods of operation of the DCF. It was noted that  
3 the DCF operating rules would require attention in the future to address a number of new  
4 circumstances, including updating long term average hydro generation values, fund  
5 “triggers”, and potentially a means to address secondary sales. Today, following  
6 connection of the WAF and Mayo Dawson grids, it is also necessary to adjust the DCF  
7 to deal with more than only WAF hydro generation. Until the necessary changes in  
8 operating rules are addressed and reviewed and approved by the YUB Yukon Energy  
9 does not anticipate that it would trigger operation of the DCF fund.

10  
11 **(e)**

12  
13 In the event that diesel was on the margin and the WAF grid was not connected to the  
14 Mayo Dawson grid, the last Board approved long term forecast WAF hydro generation is  
15 presumed to provide the only existing basis for monthly credits/debits to the account with  
16 regard to WAF hydro and diesel generation. As noted in response to (d) and (f) above,  
17 YUB-YEC/YECL-2-4 and LE-YEC/YECL-1-5 REVISED the DCF rules and methods  
18 need to be reviewed and updated due to material changes to the Yukon system since  
19 the DCF was last active (i.e., diesel has not been on the margin since the late 1990’s  
20 and the DCF has not been active since that time). In this respect, the long term average  
21 is required to be updated to consider current system conditions (added generation) and  
22 the application of the DCF needs to be expanded to consider the integrated grid system  
23 (the DCF currently only applies to the former WAF grid).

24  
25 **(g)**

26  
27 See (d) and (f) above and LE-YEC/YECL-1-4 REVISED and LE-YEC/YECL-1-5  
28 REVISED for detailed explanations and examples regarding how the DCF and Rider F  
29 are not interrelated.

30  
31 Rider F is a fuel price adjustment mechanism that addresses only risks related to  
32 changes in fuel price from GRA-approved forecast fuel price - Rider F does not address  
33 risk (at GRA-approved fuel prices) for any changes in diesel generation fuel volume from  
34 the GRA forecast. All fuel price related risks are addressed by Rider F.

1 In this regard, the risk addressed by Rider F is very different from the risk addressed by  
2 the DCF. The DCF was created to mitigate the impact on diesel generation volumes due  
3 to water level fluctuations affecting the amount of hydro generation available.  
4 Accordingly, the DCF mechanism deals with a separate set of risks unrelated to diesel  
5 fuel price risk and consequently the DCF mechanisms are not related to DFPVA  
6 deferrals or Rider F changes.

7  
8 The fuel price included in the DCF calculation is the GRA-approved price (i.e., the DCF  
9 only addresses risks related to water level fluctuations at the GRA-approved price and  
10 not at the actual diesel fuel price). By contrast Rider F addresses risks related to the  
11 difference between the GRA-approved fuel price and actual fuel price and GRA forecast  
12 plant efficiencies for each actual litre of fuel consumed (but does not address risks  
13 related to changes in diesel generation volume at GRA-approved fuel prices).

14  
15 Board approval of the DCF in the 1996/97 GRA was provided at a time when Rider F  
16 had been in operation for many years, and no suggestion was made at that time that the  
17 DCF in any way reduced the need for, or role of, the Rider F mechanisms.



VIA FACSIMILE  
03,668-3327

March 11, 1996

EXHIBIT B-16

Mr. Bill Byers  
Yukon Energy Corporation  
304 - 204 Lambert Street  
Whitehorse, Yukon Y1A 1Z4

Dear Mr. Byers:

Re: Proposed Settlement of Issues  
Concerning the Revenue Requirement  
and Rate Design Application of YEC and YECL

The purpose of this letter is to record the settlements we have achieved with respect to specific issues in the YEC and YECL ("the Companies") Application. This letter remains confidential until it is submitted to the Yukon Utilities Board for consideration. I, therefore, ask that you provide to me a communication of endorsement for the proposal so that we may forward it to the Board and make it public by Wednesday, March 13, 1996.

I have taken the liberty of reordering issues in our proposed settlement working sheets so that they align better with the subject areas of discussion in the Application. I have also added words to the bullets that we have agreed upon to explain the settlement to those parties who were not present at negotiations.

The settlement participants agree with the content and details of the Application, save for the following adjustments and identification of specific issues to be reviewed by the Board in public hearing. It is recognized by all the parties that the agreement represents a package proposal within which there has been give and take by all parties. No issue is to be severed from the proposed settlement without allowing signatories the opportunity to address other related issues in the package.

The terms of the settlement are as follows:

1. Return on Equity ("ROE")

It is agreed that the ROE for 1996 and 1997 is to be set at 11.25 percent and that a Diesel Contingency Fund is to be established.

2. Diesel Contingency Fund

This fund is to replace the proposed rate stabilization fund. The fund will operate to smooth customer rate changes and offset forecast diesel costs. Rates and the fund will be determined using the long-term average water expected to be available for generation (105 + 246 GW.h). The initial funding will be determined based upon the funds available as at December 31, 1995. If additional funding becomes available due to other determinations with respect to diesel costs or other utility costs in 1995, the fund will be adjusted. The fund is only to be used for the purposes of stabilizing customer rates and offsetting diesel generation cost estimates and the fund is not to be accessed for other reasons, including government subsidy of rates.

The cap on the fund is set at the initial contribution level. If the fund accumulates revenues in excess of the cap, the surplus balance at the end of the year is to be refunded by way of a rate-rider to customers over the following two years. If the fund falls below the equivalent negative cap level, a rate-rider increasing customer bills will occur to maintain the fund within the positive and

negative cap levels. The fund is to attract interest based upon the short/intermediate term bond rates in which the Companies may invest the fund and any negative balances would only attract interest at the lowest short-term borrowing rate available to the Companies through a line of credit.

The fund is to operate outside of rate base but an annual report detailing additions and deletions to the fund is to be filed with the Board so that the Board may oversee the fund activities. The Board will direct the Companies on the additions and deletions to the fund. The annual report to the Board will also include a forecast of available water for the following year.

3. Capital Structure

The Companies agreed to back preferred shares out of their capital structure as soon as feasible. As the preferred shares are refunded, the Board is to consider appropriate common equity levels at future GRA hearings, having regard to the most efficient capital structure for the future.

4. Demand-Side Management ("DSM")

The DSM costs identified in the Application are accepted. A working group is to be formed, under terms of reference set by the Board, to make recommendations on energy management, conservation and efficient use programs and rates. The working group will also consider rate methods to encourage industrial self-generation when this will benefit system rates. The working group will also consider joint programs with municipalities. This working group is to be convened within one month following the Decision and a report is to be filed with the Board no later than November 1, 1996.

5. Capital Projects

The proposed capital projects schedule of the Companies is agreed to with the following changes:

- The new diesel plant at Dawson is agreed to.
- The Grum Substation is to be reassessed with ARM and it will only be added if required, and if alternative generation is not feasible. The capital cost of the substation and additional works is to be recovered from ARM so that there will be no impact on other customers.
- Any new transmission, distribution or substation capital requirement for new mines is to be paid for up front by the new mine so that other customers are not burdened with these costs.
- The proposed automatic meter reading program is removed from the 1997 budget and will be reconsidered for inclusion in 1998, or later.

6. Revenue Requirement

The revenue requirement budgets are accepted with the following conditions or changes:

- The sales forecast is to be revised based on the ARM Slurry Pipeline not proceeding.
- The Companies will revise the budgets to reflect the agreed upon long-term average water levels in the Diesel Contingency Fund.
- The Companies are undertaking a revised line loss study which is to be filed before the hearing and will be considered at the hearing.

- The program of additional maintenance for upgradings which is scheduled for completion in 1996 has been reviewed and is agreed to by the parties.
- The escalating charges from YECL's parent company, including potential future customer information system charges, are to be reviewed annually and the company is to seek out least cost alternatives.
- The Companies are to provide actual rate application costs for determination of final rates.

7. Review of Land Transactions

The proposed actions to dispose of certain housing and reconstruct new housing have been reviewed and found to be generally acceptable. The Companies detailed that any revenues from the sale of existing housing has been shown on the books such that it offsets a part of the new housing construction. UCG is to consider this issue further and report back to the Board prior to the hearing if it wishes to pursue further examination of the Companies' land transactions.

8. 1995 Interim Rates

The parties agree that the 1995 Interim Rates should be confirmed as permanent.

9. ARM Interim Rates

The interim rates outstanding for ARM since 1994 are to be confirmed as permanent.

10. Rate Design Issues

The rate design philosophy of the Companies is accepted subject to review at the hearing of Issue No. 11.

YECL and YEC are to commit to provide a preliminary cost assessment of each community in the four zones based upon the same methodology as was used in the 1992 study, updated to use 1995 data. The cost assessment is to be filed with the Board by July 1, 1996.

11. Cost of Service Allocations

The cost of service allocations are to be reviewed at the public hearing along with the appropriate revenue/cost ratios that are to be achieved by various customer classes.

12. Performance Indicators

The Companies have provided performance indicators as required by previous board decisions. Further analysis is to be undertaken to determine meaningful, measurable performance indicators to be used as a tool for management to assess performance in the areas of field generation, transmission, distribution and customer service. A report is to be filed by July 1, 1996. Based on the success of performance indicators during the current test period, the companies may suggest incentives tied to performance indicators for a future GRA.

Home Based Businesses

The Companies' policy with respect to home based businesses has been reviewed and found to be acceptable. It is to be filed as an Electric Service Regulation.

14. Electric Service Regulations

The proposed increase in charges for dishonoured cheques and reconnection charges are agreed to as being reasonable.

15. Retention of Monthly Time Sheets for YEC

An annual reporting by March 31 of the following year, is to be filed with the board detailing time spent on YEC versus YDC activities.

16. Filing of Monthly Fuel and Outage Reports

It is agreed that these reports should be replaced by performance indicators as they are developed. Until then quarterly reporting should be adequate for Board and customer reviews.

The companies are to provide an updated filing to the Board showing the revised revenue requirements of this proposed settlement. It may be that the reductions identified will lead to lower rates in 1996. That filing is to be made by Friday, March 15, 1996.

On another matter, the participants considered the UCG complaint with respect to water spillage in 1993 and 1994. The parties were unable to achieve a consensus view to suggest a resolution of the complaint. All intervenors present have agreed that this complaint should be heard at the upcoming public hearing.

In closing, I wish to commend the efforts of the Companies and all intervenors at the workshops and settlement discussions. The extensive efforts made by all parties to understand each issue along with the concerns and interests of other parties has allowed this settlement to come to fruition.

Yours truly,



W.J. Grant

WJG/ssc

MiscCor/YEC•YECL Specific Issues

YUKON  
ENERGY



Our File: 2/5590-08-00  
2/8005-07

JUN 11 1999

YUKON ENERGY  
CORPORATION  
P.O. BOX 5920  
WHITEHORSE  
YUKON Y1A 5L7  
Telephone (867)667-5028  
FAX (867)393-6327

EXHIBIT B18

June 2, 1999

Yukon Utilities Board  
#19, 10014 1st Avenue  
P.O. Box 6070  
Whitehorse, Yukon  
Y1A 5L7

FAXED  
99/06/04  
Om

**Attention: Mr. Jim Slater, Board Secretary**

Dear Sir:

**Re: Diesel Contingency Fund Filings: 1996 to 1998**

Please find attached the final report, which details the changes to the Diesel Contingency Fund (DCF) in 1998. Also attached are revised reports for 1996 and 1997. This filing includes a correction to remove fire-related impacts for the period October through December 1997. It also includes, for convenience, copies of relevant DCF tables for The Yukon Electrical Company Limited. We understand that both utilities have agreed on all of the DCF filings for 1996 through 1998.

The 1996/97 Settlement Agreement provided as follows:

*"The fund is to operate outside of rate base but an annual report detailing additions and deletions to the fund is to be filed with the Board so that the Board may oversee the fund activities. The Board will direct the Companies on the additions and deletions to the fund. The annual report to the Board will also include a forecast of available water for the following year."*

Please find attached the following schedules and tables related to the Diesel Contingency Fund.

1. Summary of 1996 and 1997 DCF calculation revisions
2. DCF continuity schedule: January 1, 1996 - December 31, 1998
3. Revised 1996 and 1997 as well as final 1998 DCF schedules.

The Yukon Utilities Board is requested to approve the 1998 DCF as filed. Also, the Board has not yet approved the DCF filings for 1996 and 1997. It is requested that the Board approve the revised DCF schedules for 1996 and 1997 as final.

As requested by BCUC staff, The Yukon Electrical Company Limited and Yukon Energy Corporation discussed the DCF with BCUC staff on April 13, 1999. The current filing includes background information to explain the operation of the DCF to date (see below). Yukon

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Electrical and Yukon Energy will prepare a submission to the Yukon Utilities Board regarding the operation of the DCF for 1999 and beyond.

We note that the Settlement requires that the annual DCF report include a forecast of available water for 1999. YEC will file with the Board, as soon as possible, the annual forecast in this regard for its facilities when this forecast is filed with the Yukon Territorial Water Board.

### GENERAL INFORMATION ON DCF OPERATIONS

The DCF was established as at January 1, 1996 in accordance with the 1996/97 Settlement Agreement. Except for material differences specified in the 1996/97 Settlement Agreement, the DCF has been operated on the same basis as the Low Water Reserve Fund (LWRF) previously in place from 1991 through 1995.

Operation of the DCF has been described previously in letters to the Board dated May 6, 1997 and June 24, 1997. For convenience, the following points are summarized:

- (a) **The opening balance of the DCF as at January 1, 1996:** The DCF opening balance was \$4,040,046 as detailed in response to Question 2 in the June 24, 1997 letter (this earlier letter incorrectly references the date January 1, 1997 rather than January 1, 1996).
- (b) **The positive and negative caps on the DCF:** As confirmed in the response to Questions 3 and 4 of the June 24, 1997 letter, the current "cap" on the DCF pursuant to the 1996/97 Settlement Agreement equals the initial contribution (namely, \$4,040,046). Further, the current "negative cap" on the DCF pursuant to the 1996/97 Settlement Agreement is -\$4,040,046, i.e., the same amount (with the reverse sign) as specified for the initial contribution and the current "cap" for contributions to the DCF. It is understood that all of the DCF terms and conditions are to be reviewed at the next GRA.
- (c) **Long-term average non-diesel generation:** The DCF has operated to offset diesel generation cost changes for the WAF system that are caused solely by variances from long-term average levels of WAF system hydro and wind generation. The Negotiated Settlement Package (NSP) stipulates long-term average hydro generation of 105 GW.h (for YEC's Aishihik facility) plus 246 GW.h (for YEC's Whitehorse Rapids facility). The much smaller YEC wind generation (0.3 GW.h) and YECL Fish Lake hydro (10 GW.h), which were not included in the earlier LWRF, have also been included in the DCF operation in accordance with the 1996/97 General Rate Application. It is understood in this regard that the NSP effectively adopted the 1996/97 General Rate Application unless specific mention was made of an issue in the NSP or the Board made a specific direction to alter the NSP.
- (d) **Diesel generation saving or excess for YEC:** The calculation of diesel generation saving (or excess) related to non-diesel generation for YEC is calculated to remove the effects of variances in total WAF generation for YEC (expected generation at line 14 for YEC). This reflects procedures previously approved for LWRF operation, based on Decision 1992-1 and the 1993/94 GRA response to WHSE-YEC/YECL-33(a). When the

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LWRF was last calculated with diesel on the margin (1992), it was calculated on the basis of annual numbers without attempting to assess minimum diesel requirements (at line 10 in the YEC DCF) on either a monthly or annual basis.

- (e) **Diesel cost savings or excess for YEC:** The YEC diesel cost savings or excess are calculated based on the approved forecasts for 1996 for YEC WAF diesel generation per kW.h costs, assuming standard efficiency at 3.71 kWh/litre of fuel and YEC average WAF diesel fuel price forecast at approximately 29.60 cents per litre. Variable O&M costs per kW.h for diesel generation are assumed at 1.6 cents ~~per litre~~, as assumed for the approved 1996/97 GRA retail run-out rate calculations for WAF. These procedures in general reflect the procedures previously approved for operation of the LWRF.
- (f) **DCF calculations for YECL Fish Lake:** Imputed diesel generation savings or excess related to the YECL Fish Lake hydro facility are calculated as follows:
- actual Fish Lake generation is compared with the long-term average Fish Lake generation forecast per the 1996/97 GRA filing
  - imputed diesel cost savings or excess for YECL are calculated assuming the YEC WAF diesel generation standard efficiency and fuel prices are described above.
- (g) **Interest calculations:** The NSP provided for interest income or expense to be calculated for the DCF based on stipulated provisions. No similar provisions existed for the LWRF.
- (h) **DCF suspended when diesel is not on the margin:** The evidence provided to the Board in the NSP, and during the 1996 GRA hearing, specified that the DCF was to be only used for offsetting diesel generation, and that the DCF would only be active when diesel is on the margin. In this regard, the 1996 evidence presumed that diesel generation is not on the margin for the WAF system when the Faro mine is closed; this presumption assumed the availability of normal long-term hydro generation capability.

#### ADJUSTMENTS TO 1996 AND 1997 DCF FILINGS

The 1996 and 1997 DCF filings as previously provided to the Board generally reflected principles and practices as described above.

The latest filing with the Board, however, includes various adjustments to the YEC-related numbers as documented in the attached table titled "Summary of 1996 and 1997 DCF Revisions". These adjustments, in summary, increase the DCF December 31, 1997 balance as previously reported by \$436,923.26. The major changes are commented on briefly below:

- **Interest calculations:** Adoption of standard monthly interest income calculation procedures, starting January 1, 1996. This includes adjustment of entries as required for the initial opening balance, and other subsequent payments, to reflect the proper timing for these transactions.

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- **Line 10 correction – determination as to whether diesel is on the margin:** Correction was made to remove any “minimum required diesel generation” assumption for YEC at line 10 of the DCF table. This line is now used solely to specify whether diesel generation is on the margin for YEC in each month (assuming long-term hydro capability). This determination affects both the YEC DCF and the YECL DCF (at line 3). As noted, and as previously reported, diesel was not on the margin from June 1 to October 31, 1997. During 1998, diesel was not on the margin from February 1 to December 31, 1998.
- **Procedures to assess diesel on margin issues when Faro mine closed:** Experience since the Faro mine closure in 1998 has re-affirmed that diesel generation can in fact go back on the margin for the YEC WAF system during certain months, under specific “non-normal” conditions, even though the Faro mine is closed. The line 10 determination regarding “diesel on the margin” is made on the basis of WAF total required generation and normal long-term hydro capability. In order to provide for some minor diesel generation that may occur for voltage stability or peaking purposes, without being related to variances from long-term hydro capability, the DCF is not activated in any month when diesel is not on the margin (per line 10) and YEC diesel generation does not exceed 250,000 kW.h for the month. This adjustment at line 16 of the YEC DCF schedule then allows for the DCF to be activated for actual diesel use during months when the Faro mine is closed and diesel generation is still required in excess of 250,000 kW.h due specifically to below-normal YEC WAF hydro capability. In practice, diesel generation remained less than 250,000 kW.h in all 1997 and 1998 months when diesel was not on the margin (see the line 10 correction above), except for October 1997 and July 1998 – and these exceptions related to YEC fire impacts as described below.
- **Fire-related impacts:** The DCF has been adjusted in 1997 and 1998 to remove impacts caused by fires affecting YEC's operations. Because of the importance of these adjustments, they are explicitly reviewed below in more detail. These adjustments affect three months in 1997 (October to December inclusive).
- **Other minor adjustments:** As noted in the attached material, various other minor adjustments have been made, including corrections to reflect actual YEC generation during the final three months of 1997 and corrections regarding the YUB 1997-7 drawdown amounts.

#### **DCF ADJUSTMENTS TO ADDRESS YEC FIRE-RELATED IMPACTS**

Actual diesel generation for YEC was required during three months of 1997 (October through December) due to reduced hydro capability caused by the October 1997 fire at the Whitehorse Rapids hydro facility. These fire impacts have been estimated for each month in the attached tables (see note 5 to the first table). Under the terms of YEC's insurance policy there is a 30-day waiting period during which the cost of any fire-related diesel generation is not claimable. Accordingly, the DCF drawdown for October and November 1997 due to the fire was charged to the YEC Reserve for Injuries and Damages. The DCF drawdown for December 1997 has been charged to the fire insurance claim. (It is noted that YEC's last filing on this fire was last June 1998 in response to UCG-YEC-2-7, which included a letter to the Board dated June 26, 1998. This letter said that costs incurred for extra diesel generation in 1997 have been met in their

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entirety either through use of the DCF, during the non-insured period, or thereafter through insurance coverage. It also noted that the property loss deductible was charged in 1997 through YEC's reserve for injuries and damages – but no mention was made of diesel generation being charged to this account during the non-insurance period. This change from what was previously reported on fire issues is beneficial to the DCF.)

During July 1998, YEC experienced a major forest fire that shut down the Faro transmission line for some time forcing YEC to generate diesel from the Faro plant. This diesel generation impact had nothing to do with hydro generation capability, and thus cannot be charged to the DCF. As noted in the attached table titled "DCF Continuity Schedule 1996-1998", this forest fire impact on the DCF of \$58,182.00 for July 1998 has all been charged to the Reserve for Injuries and Damages.

If you have any questions, please give me a call.

Sincerely,



Rob McWilliam  
President & Chief Executive Officer

/dm  
Attachments

c John Carroll, General Manager, The Yukon Electrical Company Limited  
Cam Osler, InterGroup Consultants Ltd.

**FAXED**  
99/06/04  
Dm

Please find attached the following draft schedules and tables related to the Diesel Contingency Fund as filed jointly by Yukon Energy Corporation and The Yukon Electrical Company Limited.

- 1 Summary of 1996 and 1997 DCF calculation revisions
- 2 DCF continuity schedule January 1, 1996 - December 31, 1998
- 3 Revised 1996 and 1997 as well as 1998 DCF calculation schedules

These schedules were prepared by YEC based on YEC's understanding and interpretation of relevant board orders and the intent of the DCF. YECL's understanding and interpretation of relevant board orders and the intent of the DCF may differ from YEC's. These schedules will be reviewed by Barry McKinley of BCUC with YEC and YECL during the week of April 12, 1999.

**SUMMARY OF 1996 AND 1997 DCF REVISIONS**

	As Filed	Revised	Change	Reference
1996				
Opening balance	500,000.00	4,040,046.00	3,540,046.00	1
Additions (Reductions)	3,540,046.00		(3,540,046.00)	1
YEC Buildup (Drawdown)	(1,034,266.13)	(1,131,866.82)	(97,600.69)	2
YECL Buildup (Drawdown)	(325,803.92)	(325,803.92)	-	
Interest and service charges	148,358.17	188,741.49	40,383.32	3
Closing balance	2,828,334.12	2,771,116.75	(57,217.37)	
1997				
Opening balance	2,828,334.12	2,771,116.75	(57,217.37)	
YUB 1997/7 Drawdown	(348,992.80)	(346,275.62)	2,717.18	4
YEC Fire Impact Buildup	-	516,167.23	516,167.23	5
YEC Buildup (Drawdown)	23,279.99	(13,253.20)	(36,533.19)	6
YECL Buildup (Drawdown)	(177,878.50)	(177,878.50)	-	
Interest and service charges	73,343.31	85,132.72	11,789.41	3
Closing balance	2,398,066.12	2,835,009.38	436,923.26	

- 1 The previously filed schedule, for 1996, showed the YUB approved deposit of \$3,540,046.00 as an addition in March and also included imputed interest calculated retroactively to January 1, 1996. In the revised schedule the \$3,540,046.00 is included as part of the beginning balance of the DCF. Interest on this amount is calculated on a monthly basis from January 1, 1996.
- 2 During 1997, it was noted that the DCF was being incorrectly calculated by manually inputting at Line 10 "minimum required diesel generation" of 635,000 kW.h per month for YEC. Line 10 has been adjusted for 1996 and 1997 to deal solely with specifying whether diesel generation is on the margin for YEC each month (assuming long-term average Hydro capability). If diesel remains on the margin throughout the year, the final annual drawdown or build-up is in effect calculated on the basis of annual rather than monthly numbers. In the event that diesel is not on the margin for YEC's WAF generation during any month (assuming long-term Hydro capability), diesel savings (excess) equal zero at Line 16 for YEC (and at line 3 for YECL) in any month when diesel generation is not on the margin for YEC incremental generation. Diesel is not on the margin when so indicated at line 10 for any month (based on long-term Hydro capability), provided that YEC diesel generation does not exceed 250,000 KW.h in that month. This procedure allows for some minor diesel generation that may occur for voltage stability or peaking purposes, without being related to variances from long-term Hydro capability. The DCF was specifically approved to deal with diesel generation related solely to variances from long-term Hydro capability.
- 3 The change in interest is a result of calculating interest on the DCF balance on a monthly basis after the DCF schedules were adjusted for the various noted items.
- 4 The YUB 1997/7 Drawdown was incorrectly stated in the original 1997 filing.
- 5 The 1997 DCF calculations have been revised to reflect the reduced Hydro capability resulting from the loss of Hydro generating units in the fire of October, 1997. These revisions are outlined in the following Tables 1, 2 and 3.
- 6 This difference is mainly due to diesel generation for October being in excess of 250,000 KWh when diesel was off the margin (refer to note 2 for the rationale). The difference is also partially due to the fact that the filed 1997 DCF schedule included estimates for generation for the last three months of 1997 as a result of the fire. The revised 1997 DCF schedule has been revised using actual generation figures.

**Table 1: DCF - Including Fire Related Diesel Generation:**

Line#			OCT-1997	NOV-1997	DEC-1997
<b>Actual generation - Mwh</b>					
1	Hydro	Manual Input	25,580,480	27,851,195	33,706,072
1a	Wind	Manual Input	17,840	6,530	21,370
2	Diesel	Manual Input	357,870	7,140,520	6,747,710
3	Total	Line 1 + Line 2	25,956,200	34,798,245	40,475,152
<b>Forecast Generation - Mwh</b>					
4	Hydro	Manual Input	32,502,876	30,785,226	29,775,138
4a	Wind	Manual Input	30,000	30,000	30,000
5	Diesel	Manual Input	3,611,785	7,995,231	11,851,208
6	Total	Line 4 + Line 5	36,144,661	38,790,457	41,656,346
<b>Variance - Mwh</b>					
7	Hydro and wind	Line 1 - Line 4	(6,034,346)	(3,137,501)	3,922,304
8	Diesel	Line 2 - Line 5	(3,253,895)	(854,711)	(5,103,498)
9	Total (favourable)	Line 3 - Line 6	(10,188,241)	(3,992,212)	(1,181,194)
<b>Expected diesel generation - Mwh:</b>					
Greater of (savings to a maximum of forecast diesel):					
10	Diesel on margin (1 = yes, 0 = no)	Manual Input	0	1	1
(YEC generation requirement long term avg Hydro capability)					
11	Forecast generation	Line 5	3,611,785	7,995,231	11,851,208
12	Total variance	Line 9	(10,188,241)	(3,992,212)	(1,181,194)
13		Line 11 + Line 12	(6,576,476)	4,003,019	10,670,014
14	Expected generation	Line 13 if Ln 10 = 1 otherwise = 0	-	4,003,019	10,670,014
14a	Maximum savings available	Line 5	3,611,785	7,995,231	11,851,208
15	Actual diesel generation	Line 2	357,870	7,140,520	6,747,710
16	Diesel savings (excess) (Mwh)	Line 14-Line 15 (max line 14a if Ln 10 = 1; otherwise = 0, unless Ln 15 > 250,000)	(357,870)	(3,137,501)	3,922,304
17	Standard efficiency(kwh/l)	Manual Input	3.71	3.71	3.71
18	Standard litres - 000 litres	Line 16/Line 17	(96,461)	(845,688)	1,057,225
19	Standard price(\$ per litre)	Manual Input	0.2880	0.2860	0.2860
<b>Reserve Buildup (drawdown)</b>					
20	YEC Variable O&M costs(\$ per litre)	Manual Input	0.018	0.018	0.018
21	YEC Fuel savings (excess)	Line 18 x Line 19	(28,656.10)	(250,355.87)	312,878.71
22	YEC Variable O&M costs	Line 20 x Line 16	(5,725.92)	(50,200.02)	62,766.88
23	YEC buildup (drawdown)	Line 21 + 22	(34,282.02)	(300,555.89)	375,735.57
24	YECL buildup (drawdown)	See YECL Table	0	(21,445.42)	(13,233.58)
25	Total buildup (drawdown)	Line 23 + 24	(34,282.02)	(322,001.11)	362,501.99

**Table 2: DCF - Excluding Fire Related Diesel Generation:**

Line#			OCT-1997	NOV-1997	DEC-1997
<b>Actual generation - Mwh</b>					
1	Hydro	Manual Input	25,840,480	31,500,795	34,888,872
1a	Wind	Manual Input	17,840	6,580	21,370
2	Diesel	Manual Input	97,870	3,280,820	5,568,810
3	Total	Line 1 + Line 2	25,956,200	34,788,245	40,475,152
<b>Forecast Generation - Mwh</b>					
4	Hydro	Manual Input	32,582,876	30,785,226	29,775,138
4a	Wind	Manual Input	30,000	30,000	30,000
5	Diesel	Manual Input	3,811,765	7,995,231	11,851,208
6	Total	Line 4 + Line 5	36,144,441	38,780,457	41,656,346
<b>Variance - Mwh</b>					
7	Hydro and wind	Line 1 - Line 4	(6,674,346)	712,089	5,103,104
8	Diesel	Line 2 - Line 5	(3,513,895)	(4,704,311)	(6,284,288)
9	Total (favourable)	Line 3 - Line 6	(10,188,241)	(3,992,212)	(1,181,184)
<b>Expected diesel generation - Mwh:</b>					
Greater of (savings to a maximum of forecast diesel):					
10	Diesel on margin (1=yes, 0=no) (YEC generation requirement long term avg Hydro capability)	Manual Input	0	1	1
11	Forecast generation	Line 5	3,811,765	7,995,231	11,851,208
12	Total variance	Line 9	(10,188,241)	(3,992,212)	(1,181,184)
13		Line 11 + Line 12	(6,576,476)	4,003,019	10,670,014
14	Expected generation	Line 13 if Ln 10 = 1 other = 0	-	4,003,019	10,670,014
14a	Maximum savings available	Line 5	3,811,765	7,995,231	11,851,208
15	Actual diesel generation	Line 2	97,870	3,280,820	5,568,910
16	Diesel savings (excess) (Mwh)	Line 14-Line 15 (max line 14a if Ln 10 = 1; otherwise = 0, unless Ln 15 > 250,000)	-	712,099	5,103,104
17	Standard efficiency(kwh/l)	Manual Input	3.71	3.71	3.71
18	Standard litres - 000 litres	Line 16/Line 17	-	181,940	1,375,500
19	Standard price(\$ per litre)	Manual Input	0.2980	0.2980	0.2980
<b>Reserve Buildup (drawdown)</b>					
20	YEC Variable O&M costs(\$ per litre)	Manual Input	0.016	0.016	0.016
21	YEC Fuel savings (excess)	Line 18 x Line 19	-	56,821.66	407,200.19
22	YEC Variable O&M costs	Line 20 x Line 16	-	11,393.58	81,849.66
23	YEC buildup (drawdown)	Line 21 + 22	-	68,215.24	489,049.85
24	YECL buildup (drawdown)	See YECL Table	-	(21,445.42)	(13,233.58)
25	Total buildup (drawdown)	Line 23 + 24	-	46,769.82	475,816.27

**Table 3: DCF - Fire Impact**

Line#			OCT-1997	NOV-1997	DEC-1997
	<b>Actual generation - Mwh</b>				
1	Hydro	Manual Input	260,000	3,849,600	1,180,800
1a	Wind	Manual Input	0	0	0
2	Diesel	Manual Input	(260,000)	(3,849,600)	(1,180,800)
3	Total	Line 1 + Line 2	0	0	0
	<b>Forecast Generation - Mwh</b>				
4	Hydro	Manual Input	0	0	0
4a	Wind	Manual Input	0	0	0
5	Diesel	Manual Input	0	0	0
6	Total	Line 4 + Line 5	0	0	0
	<b>Variance - Mwh</b>				
7	Hydro and wind	Line 1 - Line 4	260,000	3,849,600	1,180,800
8	Diesel	Line 2 - Line 5	(260,000)	(3,849,600)	(1,180,800)
9	Total (favourable)	Line 3 - Line 6	0	0	0
	<b>Expected diesel generation - Mwh:</b>				
	Greater of (savings to a maximum of forecast diesel):				
10	Diesel on margin (1 = yes, 0 = no)	Manual Input	0	1	1
	(YEC generation requirement long term avg Hydro capability)				
11	Forecast generation	Line 5	0	0	0
12	Total variance	Line 8	0	0	0
13		Line 11 + Line 12	0	0	0
14	Expected generation	Line 13 if Ln 10 = 1 other = 0	0	0	0
14a	Maximum savings available	Line 5	0	0	0
15	Actual diesel generation	Line 2	(260,000)	(3,849,600)	(1,180,800)
16	Diesel savings (excess) (Mwh)	Line 14-Line 15 (max line 14a if Ln 10 = 1; otherwise = 0, unless Ln 16 > 250,000)	357,870	3,849,600	1,180,800
17	Standard efficiency(kwh/l)	Manual Input	3.71	3.71	3.71
18	Standard litres - 000 litres	Line 16/Line 17	98,461	1,037,629	318,275
19	Standard price(\$ per litre)	Manual Input	0.2860		
	<b>Reserve Buildup (drawdown):</b>				
20	YEC Variable O&M costs(\$ per litre)	Manual Input	0.016	0.016	0.016
21	YEC Fuel savings (excess)	Line 18 x Line 19	28,556.10	307,177.33	94,221.48
22	YEC Variable O&M costs	Line 20 x Line 18	5,725.92	61,593.60	18,892.80
23	YEC buildup (drawdown)	Line 21+22	34,282.02	368,770.93	113,114.28
24	YECL buildup (drawdown)	See YECL Table	-	-	-
25	Total buildup (drawdown)	Line 23 +24	34,282.02	368,770.93	113,114.28

Under the terms of the insurance policy there is a 30 day waiting period during which the cost of any fire related diesel generation is not claimable. Accordingly the DCF drawdown for October and November was charged to the Reserve for Injuries and Damages. The DCF drawdown for December has been charged to the fire insurance claim.

**DCF CONTINUITY SCHEDULE 1996 - 1998**

<b>1996</b>	Opening balance (Old LWRF balance)	500,000.00	
	YUB approved deposits	<u>3,540,046.00</u>	4,040,046.00
	YEC withdrawals - Fuel	(942,817.87)	
	YEC withdrawals - O&M	<u>(189,048.95)</u>	(1,131,866.82)
	YECL withdrawals		(325,803.92)
	Interest Income/Service Fees		<u>188,741.49</u>
	Ending Balance		<u><u>2,771,116.75</u></u>
<b>1997</b>	Opening balance		2,771,116.75
	YUB 1997/7 Drawdown		(346,275.62)
	YEC Fire Impact - Charged to the Reserve for Injuries and Damages		403,052.95
	YEC Fire Impact - Charged to the fire insurance claim		113,114.28
	YEC drawdown - Fuel	(11,039.59)	
	YEC drawdown - O&M	<u>(2,213.61)</u>	(13,253.20)
	YECL withdrawals		(177,878.50)
	Interest Income/Service Fees		<u>85,132.72</u>
	Ending Balance		<u><u>2,835,009.38</u></u>
<b>1998</b>	Opening balance		2,835,009.38
	DCF Rider Drawdown		(1,283,018.76)
	Forest Fire Impact - Charged to the Reserve for Injuries and Damages		58,182.00
	YEC buildup - Fuel	399,743.47	
	YEC buildup - O&M	<u>80,154.48</u>	479,897.95
	YECL Net withdrawals		(12,958.18)
	Interest Income/Service Fees		<u>158,646.58</u>
	Ending Balance		<u><u>2,235,758.97</u></u>

1888 DCF CALCULATIONS - REVISED															
TABLE 1: YUKON ENERGY CORPORATION - actual to Dec 31															
Carminity schedule, year ending Dec. 31, 1888 - Diesel Emergency Fuel Calculations - WAF System (1000)															
	Use#		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>Actual generation - KWh</b>															
Hydra	1	Manual Input	30,485,457	32,454,968	32,780,854	29,882,584	27,039,951	23,572,896	25,817,964	26,188,561	26,573,048	27,038,103	25,798,101	29,781,818	338,342,001
Wind	1a	Manual Input	409	28,000	39,790	18,118	17,210	18,230	6,860	11,380	27,270	12,000	26,680	30,120	230,170
Wind	2	Manual Input	17,177,780	7,208,330	5,899,070	5,977,420	7,005,540	7,243,322	4,833,888	3,162,720	3,625,620	10,750,230	18,763,380	14,727,860	104,555,340
Total	3	Line 1 + Line 2	47,663,777	39,682,378	38,789,914	35,873,194	34,062,491	30,435,638	30,758,012	31,572,681	32,226,838	37,800,333	44,515,041	44,545,998	444,127,511
<b>Forecast Generation - KWh</b>															
Hydra	4	Manual Input	28,408,871	26,221,578	26,482,008	26,018,888	24,202,463	30,169,783	31,072,278	30,772,277	31,288,877	32,502,304	33,164,983	28,775,270	361,087,729.50
Wind	4a	Manual Input	30,000	28,000	28,000	25,000	24,000	15,000	16,000	20,000	25,000	30,000	30,000	30,000	300,000.00
Wind	5	Manual Input	13,548,383	12,320,551	12,307,032	9,070,812	8,636,898	1,821,673	820,630	1,321,175	1,857,321	3,507,206	5,491,845	11,838,380	63,889,818.00
Total	8	Line 4 + Line 5	42,987,254	38,570,227	38,827,040	35,114,771	33,883,481	32,008,258	32,007,908	32,113,452	33,182,196	36,039,510	38,686,808	41,743,850	426,247,845.50
<b>Variance - KWh</b>															
Hydra and wind	7	Line 1 - Line 4	1,876,346	6,233,470	6,297,436	3,951,816	2,830,388	(8,531,067)	(6,282,354)	(2,582,308)	(2,724,558)	(5,482,201)	(6,433,302)	(73,224)	(11,816,568)
Wind	8	Line 2 - Line 5	3,831,367	(5,111,321)	(6,317,862)	(2,093,482)	(2,651,456)	6,321,748	4,012,458	1,841,645	1,768,199	7,243,024	11,261,235	2,788,580	20,695,424
Total (Favorable)	9	Line 3 - Line 8	4,860,713	1,122,149	(27,526)	858,333	178,940	(2,209,319)	(1,249,899)	(740,783)	(956,359)	1,780,823	1,826,433	2,716,348	8,878,868
<b>Forecast of total generation - KWh</b>															
Structure of forecasts to a maximum of forecast amount:															
Forecast on average (1 - year, 0 - no)	10	Manual Input	1	1	1	1	1	1	1	1	1	1	1	1	1
<b>YEC generation requirement at long term average Hydra capability</b>															
Forecast generation	11	Line 5	13,548,383	12,320,551	12,307,032	9,070,812	8,636,898	1,821,673	820,630	1,321,175	1,857,321	3,507,206	5,491,845	11,838,380	63,889,818.00
Total variance	12	Line 9	4,860,713	1,122,149	(27,526)	858,333	178,940	(2,209,319)	(1,249,899)	(740,783)	(956,359)	1,780,823	1,826,433	2,716,348	8,878,868.00
Forecast generation	13	Line 11 + Line 12	18,207,108	13,442,800	12,289,508	9,929,235	9,835,838	890,258	(229,269)	580,414	900,981	5,288,028	7,320,078	14,854,728	82,736,781.50
Forecast generation	14	Line 13 if Line 10 = 1; other = 0	18,207,108	13,442,800	12,289,508	9,929,235	9,835,838	890,258	(229,269)	580,414	900,981	5,288,028	7,320,078	14,854,728	82,736,781.50
Maximum savings available	14a	Line 5	13,548,383	12,320,551	12,307,032	9,070,812	8,636,898	1,821,673	820,630	1,321,175	1,857,321	3,507,206	5,491,845	11,838,380	63,889,818.00
Actual forecast generation	15	Line 2	17,177,780	7,208,330	5,968,070	5,977,420	7,005,540	7,243,322	4,833,888	3,162,720	3,625,620	10,750,230	18,763,380	14,727,860	104,555,340.00
<b>Diesel reserve forecast (DOY)</b>															
Standard efficiency (DOY)	16	Line 14; Line 15 (max line 14a)	3,728,346	6,233,470	6,297,436	3,951,816	2,830,388	(8,531,067)	(6,282,354)	(2,582,308)	(2,724,558)	(5,482,201)	(6,433,302)	(73,224)	(11,816,568.00)
Standard efficiency (DOY)	17	Manual Input	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71
Standard price - DOY price	18	Line 16; Line 17	277,452	1,880,181	1,892,840	1,965,178	782,410	(1,774,412)	(1,418,424)	(896,038)	(734,382)	(1,477,852)	(2,542,889)	(19,740)	(3,184,786.88)
Standard price (per firm)	19	Manual Input	0.296038	0.296038	0.296038	0.296038	0.296038	0.296038	0.296038	0.296038	0.296038	0.296038	0.296038	0.296038	0.296038
<b>Reserve Balance (forecast)</b>															
YEC Variable O&M costs (per firm)	20	Manual Input	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
YEC Fuel savings (costs)	21	Line 18 x Line 18	82,138.23	487,297.32	501,144.94	316,323.48	225,850.47	(25,283.26)	(418,907.47)	(206,054.11)	(217,406.09)	(437,450.08)	(752,726.82)	(6,843.89)	(842,817.87)
YEC Variable O&M costs	22	Line 20 x Line 18	16,468.58	95,735.62	100,289.98	63,229.63	45,286.38	(105,228.07)	(84,197.89)	(41,318.80)	(43,632.94)	(87,715.22)	(150,832.83)	(1,171.79)	(1,055,049.58)
YEC fuel savings (forecast)	23	Line 21 + 22	96,806.78	597,132.84	601,434.92	379,553.11	271,136.83	(630,822.33)	(504,106.18)	(247,371.01)	(261,049.03)	(525,165.30)	(603,654.49)	(7,015.44)	(1,131,896.82)
YEC fuel savings (forecast)	24	See Table 2	27,891.82	(28,142.83)	(10,263.55)	(25,283.44)	(14,055.96)	(17,859.11)	(38,243.08)	(40,549.39)	(13,688.26)	(31,417.17)	(33,550.49)	(24,737.33)	(225,803.82)
Total fuel savings (forecast)	25	Line 23 + 24	70,714.14	567,889.81	583,368.37	353,269.68	257,080.87	(648,481.44)	(542,346.21)	(287,720.40)	(274,697.31)	(558,642.47)	(637,608.91)	(41,782.77)	(1,457,670.74)
<b>Reserve balance (including interest and service fees)</b>															
Beginning reserve	26		0.00	4,118,760.14	4,878,749.85	5,282,118.02	5,815,386.90	6,872,487.77	5,223,886.33	4,880,838.12	4,382,817.72	4,118,320.41	3,681,737.84	2,824,128.03	(1,457,670.74)
Reserve balance (forecast)	27	Line 25	70,714.14	567,889.81	583,368.37	353,269.68	257,080.87	(648,481.44)	(542,346.21)	(287,720.40)	(274,697.31)	(558,642.47)	(637,608.91)	(41,782.77)	(1,457,670.74)
Transfer LWRP balance	28		500,000.00												500,000.00
YUB approved deposits	29		3,540,048.00												3,540,048.00
Ending reserve balance	30	Line 26 + 27 + 28 + 29	4,119,780.14	4,878,749.85	5,282,118.02	5,815,386.90	5,872,467.77	5,223,886.33	4,880,838.12	4,382,817.72	4,118,320.41	3,561,737.84	2,824,128.03	2,582,375.26	3,540,048.00
<b>Interest Calculations</b>															
Monthly interest rate	31		4.10%	4.10%	4.10%	4.10%	4.10%	4.22%	4.22%	4.22%	4.22%	4.22%	4.22%	4.40%	4.40%
Monthly interest earned	32	(Beg + End)/2 * rate * days/365	14,222.49	13,875.00	17,395.00	18,445.00	20,157.00	18,390.00	17,835.00	16,478.00	16,000.00	14,260.00	11,506.00	10,078.00	188,741.48
Service fees	33		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net interest earned	34	Line 32 + 33	14,222.49	13,875.00	17,395.00	18,445.00	20,157.00	18,390.00	17,835.00	16,478.00	16,000.00	14,260.00	11,506.00	10,078.00	188,741.48
Comulative net interest earned	35		14,222.49	28,097.48	45,492.48	63,937.48	84,094.48	103,484.48	121,419.48	137,897.48	162,897.48	167,157.48	178,689.48	188,741.48	
Ending reserve balance including interest	36	Line 30 + 35	4,124,002.63	4,796,847.14	5,307,810.51	5,879,324.39	5,856,562.26	5,327,470.82	4,802,057.81	4,630,816.21	4,271,217.88	3,728,895.43	2,802,791.52	2,771,116.75	

TABLE 2: THE YUKON ELECTRICAL COMPANY LIMITED - Actual to Dec 31															
Continuity schedule, year ending Dec. 31, 1996 - Diesel Continuity Fuel Calculations - WAF System (\$000)															
	Line #	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	
Actual generation - Mwh															
Hydro	1	Manual Input	565,901	548,130	602,950	555,560	651,514	651,835	425,838	454,234	722,343	519,835	465,090	478,320	6,643,781
Forecast generation - Mwh															
Hydro	2	Manual Input	657,061	650,356	783,603	616,589	786,242	828,296	625,699	675,441	865,305	847,899	619,499	840,944	10,041,844
Variance - Mwh															
Hydro	3	Line 1 - Line 2	(291,160)	(102,226)	(180,653)	(264,029)	(145,728)	(188,431)	(406,862)	(421,207)	(141,962)	(327,963)	(254,409)	(362,624)	(3,401,063)
Participated power savings (Mwh)	4	Line 3 if diesel on margin (See Table 1, Row 10)	(291,160.00)	(102,226.00)	(180,653.00)	(264,029.00)	(145,728.00)	(188,431.00)	(406,862.00)	(421,207.00)	(141,962.00)	(327,963.00)	(254,409.00)	(362,624.00)	(3,401,063.00)
Standard efficiency	17	YEC - Line 17	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	
Standard flow	18	Line 4/Line 17	(76,480)	(82,002)	(61,388)	(71,179)	(89,590)	(60,251)	(110,420)	(113,533)	(28,209)	89,400	(95,529)	(97,742)	(916,729.57)
Standard price per Btu	19	YEC - Line 19	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	
Fuel cost/mwh (forecast) - \$000	20	Line 18 x Line 19	(22,200.06)	(24,276.71)	(18,213.19)	(21,068.82)	(11,708.30)	(14,878.21)	(32,664.52)	(33,810.08)	(11,327.89)	(26,168.79)	(28,278.82)	(28,635.25)	(271,388.82)
Variable O&M costs - \$000	21	YEC Line 21 x Line 4	(4,858.86)	(4,867.82)	(3,050.45)	(4,224.82)	(2,347.86)	(2,862.80)	(6,354.58)	(6,739.31)	(2,271.39)	(5,247.41)	(5,670.54)	(6,801.89)	(54,417.00)
Reserve buildup (forecast) - \$000	22	Line 20 + Line 21	(27,058.92)	(29,144.53)	(21,263.65)	(25,293.64)	(14,056.16)	(17,741.01)	(39,019.10)	(40,549.39)	(13,600.28)	(31,410.20)	(33,949.36)	(35,437.14)	(295,805.82)
Opening reserve	23	Line 25 prior period	(226.80)	(29,217.42)	(57,380.79)	(75,624.30)	(100,917.94)	(114,873.90)	(122,633.01)	(172,078.09)	(212,625.48)	(226,024.79)	(257,441.93)	(291,392.39)	(2,129,228.72)
Cumulative reserve balance - \$000	25	Line 22 + Line 23	(28,217.42)	(67,380.79)	(75,624.30)	(100,917.94)	(114,873.90)	(132,833.01)	(172,078.09)	(212,625.48)	(226,024.79)	(257,441.93)	(291,392.39)	(326,128.72)	(2,129,228.72)

1997 OCF CALCULATIONS - REVISED															
TABLE L: YUB/YN ENERGY CORPORATION - actual to Dec 31															
Continuity schedule, year ending Dec 31, 1997 - Grand Co-ownership Fund Calculations - WAF System 2000															
	Line#		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>Actual generation - KWh</b>															
Hydro	1	Manual Input	35,245,105	30,041,842	27,432,167	13,175,813	16,758,296	16,155,292	16,447,892	17,858,478	20,488,451	25,580,490	27,851,185	31,708,072	280,538,693
Wind	1a	Manual Input	32,540	22,210	26,060	21,320	18,840	15,690	7,630	18,140	25,370	17,840	6,530	21,370	233,990
Wind	2	Manual Input	8,225,298	4,277,890	9,026,200	8,891,820	1,295,370	1,280	53,010	8,810	96,630	357,870	7,140,520	6,742,710	45,181,380
Total	3	Line 1 + Line 2	44,802,735	34,341,842	36,484,427	20,088,153	18,073,006	18,173,142	18,509,482	17,884,228	20,808,451	25,958,200	34,798,245	40,475,152	325,964,063
<b>Forscott Generation - KWh</b>															
Hydro	4	Manual Input	30,406,623	27,721,714	26,852,170	23,818,498	24,702,218	30,858,932	30,771,958	30,871,830	31,789,815	32,502,676	30,785,228	29,775,138	351,067,586.00
Wind	4a	Manual Input	30,000	28,000	28,000	25,000	24,000	15,000	15,000	20,000	25,000	30,000	30,000	30,000	300,000.00
Wind	5	Manual Input	11,839,465	10,561,285	11,037,593	11,684,238	4,502,321	1,203,010	1,348,054	1,350,512	1,442,875	3,811,785	7,895,221	11,851,208	84,205,322.00
Total	6	Line 4 + Line 5	42,276,088	38,310,999	38,957,763	35,507,737	34,228,539	32,177,942	32,133,010	32,242,342	33,267,290	38,144,441	38,790,467	41,856,346	436,582,918.00
<b>Variance - KWh</b>															
Hydro and wind	7	Line 1 - Line 4	4,840,822	2,314,138	437,047	(10,645,285)	(7,849,582)	(14,803,650)	(14,231,484)	(13,018,212)	(11,312,794)	(6,934,348)	(5,137,501)	3,922,204	(70,814,823)
Wind	8	Line 2 - Line 5	(2,514,158)	(8,283,278)	(2,812,359)	(4,702,218)	(8,206,851)	(1,201,780)	(1,293,044)	(1,348,045)	(1,348,045)	(3,253,895)	(854,711)	(5,103,438)	(89,013,942)
Total (favorable)	9	Line 7 - Line 6	2,326,664	(5,969,140)	(2,475,312)	(15,347,563)	(18,155,533)	(16,004,800)	(15,824,628)	(14,358,114)	(12,658,639)	(10,188,243)	(8,992,212)	(1,181,184)	(169,828,765)
<b>Expected annual generation - KWh</b>															
Greater of coverage to a maximum of forecast deficit															
Wind on margin (1=yes, 0=no)	10	Manual Input	1	1	1	1	1	1	1	1	1	1	1	1	1
<b>YEC generation requirement at long term average hydro capability</b>															
Forscott generation	11	Line 5	11,839,465	10,561,285	11,037,593	11,684,238	4,502,321	1,203,010	1,348,054	1,350,512	1,442,875	3,811,785	7,895,221	11,851,208	84,205,322.00
Forscott generation	12	Line 9	2,326,664	(5,969,140)	(2,475,312)	(15,347,563)	(18,155,533)	(16,004,800)	(16,824,628)	(14,358,114)	(12,658,639)	(10,188,243)	(8,992,212)	(1,181,184)	(108,628,865.00)
Total variance	13	Line 11 + Line 12	14,166,129	(6,692,128)	(6,482,247)	(6,783,245)	(16,953,212)	(14,801,790)	(15,476,574)	(13,007,602)	(11,216,168)	(4,003,018)	18,670,014	(25,423,543.00)	
Expected generation	14	Line 13 if (Line 10=1); other=0	14,166,129	6,692,128	5,482,247	-	-	-	-	-	-	-	-	-	44,893,620.00
Maximum savings available	14a	Line 5	11,839,465	10,561,285	11,037,593	11,684,238	4,502,321	1,203,010	1,348,054	1,350,512	1,442,875	3,811,785	7,895,221	11,851,208	84,205,322.00
Actual annual generation	15	Line 2	9,826,290	4,277,290	9,026,200	8,861,820	1,295,370	1,280	53,010	8,810	96,630	357,870	7,140,520	6,742,710	45,181,380.00
Wind coverage (excess) (KWh)	18	Line 14-Line 15(max line 14a)	4,840,822	2,314,138	437,047	(8,881,820)	(1,255,370)	-	-	-	-	(87,870)	(3,137,501)	3,822,204	(138,350.00)
Standard efficiency (kwh/kwh)	17	Manual Input	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71
Standard flow - 600 flow	18	Line 18/Line 17	1,204,804	823,767	117,802	(1,849,674)	(848,166)	-	-	-	-	(96,461)	(845,889)	1,057,225	(37,281.10)
Standard price (\$ per flow)	19	Manual Input	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960
<b>Energy Balance (kwh)</b>															
YEC Variable O&M Costs (\$ per flow)	20	Manual Input	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
YEC Fuel savings (excess)	21	Line 18 x Line 19	386,271.90	184,856.74	34,873.89	(547,544.22)	(103,383.54)	-	-	-	-	(28,558.19)	(250,355.87)	312,878.71	(11,028.59)
YEC Variable O&M costs	22	Line 20 x Line 16	77,453.15	37,028.21	6,992.78	(109,790.72)	(20,725.92)	-	-	-	-	(5,725.92)	(50,200.02)	62,756.88	(2,213.81)
YEC fuel/flow (drawdown)	23	Line 21 x 22	463,724.85	231,881.95	41,886.74	(857,334.94)	(124,088.48)	-	-	-	-	(34,283.02)	(600,556.89)	375,735.57	(13,263.20)
YEC building (drawdown)	24	See Table 2	(17,874.39)	(30,427.77)	(44,836.80)	(50,843.60)	483.35	-	-	-	-	-	(21,445.42)	(13,233.58)	(177,878.60)
Total building (drawdown)	25	Line 23 + 24	425,748.96	181,254.18	(2,769.88)	(857,878.44)	(123,606.18)	-	-	-	-	(34,283.02)	(172,001.11)	362,501.89	(181,131.70)
<b>Reserve balance (Excluding interest and variation fees)</b>															
Beginning reserve	26	Line 26 prior period	2,771,118.75	3,198,868.41	3,388,121.59	3,395,350.73	2,897,372.25	2,573,786.19	2,573,786.19	2,487,483.00	2,224,773.38	2,227,490.57	2,227,490.57	2,274,260.38	2,274,260.38
Reserve Building (drawdown)	27	Line 25	425,748.96	181,254.18	(2,769.88)	(857,878.44)	(123,606.19)	-	-	(108,283.19)	(242,709.81)	2,717.18	-	34,282.02	368,770.83
YUB 1987/77 Drawdown	28		-	-	-	-	-	-	-	-	-	-	-	-	115,114.28
YEC fire impact	29		-	-	-	-	-	-	-	-	-	-	-	-	616,167.23
Ending reserve balance	30	Line 26 + 27 + 28 + 29	3,198,868.41	3,388,120.59	3,395,350.73	2,897,372.28	2,573,786.19	2,573,786.19	2,487,483.00	2,224,773.39	2,227,490.57	2,227,490.57	2,274,260.38	2,748,878.68	
<b>Interest Calculations</b>															
Monthly interest rate	31		3.55%	3.54%	3.09%	3.42%	3.47%	3.48%	3.52%	3.68%	3.61%	3.93%	3.98%	2.75%	
Monthly interest earned	32	(Beg + End) / 2 * rate * (days/365)	8,864.00	8,440.00	8,000.00	6,698.00	7,811.00	7,268.00	7,694.00	7,211.00	5,898.00	7,547.00	7,486.00	5,801.00	82,618.00
Service fees	33		(1,875.64)	0.00	0.00	(1,956.60)	0.00	0.00	(1,687.44)	0.00	(1,783.74)	0.00	0.00	(7,383.28)	
Net interest earned	34	Line 32 + 33	7,008.48	8,440.00	8,000.00	6,828.44	7,811.00	7,268.00	5,986.56	7,211.00	6,688.00	5,783.26	7,486.00	5,801.00	85,132.72
Cumulative net interest earned	35		7,008.48	15,448.48	24,348.48	31,877.80	39,788.90	48,166.90	57,053.46	65,274.46	73,862.46	81,745.72	89,231.72	95,132.72	
Ending reserve balance including interest	36	Line 30 + 35	3,203,874.87	3,403,583.05	3,403,889.18	2,728,350.19	2,612,556.06	2,618,823.00	2,519,548.46	2,284,947.85	2,283,453.03	2,289,298.29	2,283,492.11	2,855,008.38	

TABLE 2: THE YUKON ELECTRICAL COMPANY LIMITED - Actual to Dec 31															
Continuity schedule, year ending Dec. 31, 1997 - Diesel Continuity Fund Calculations - WAF System (000)															
	Line #		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Actual generation - Mwh															
Hydro	1	Manual input	480,840	532,720	327,640	489,710	803,290	735,810	484,420	385,650	331,200	518,835	565,630	702,800	8,343,245
Forecast generation - Mwh															
Hydro	2	Manual input	857,061	850,356	783,633	819,599	796,243	838,296	835,598	876,441	865,905	847,698	818,489	840,944	10,041,844
Variance - Mwh															
Hydro	3	Line 1 - Line 2	(376,221)	(317,636)	(455,993)	(319,889)	(5,047)	(88,889)	(351,178)	(490,791)	(534,105)	(327,963)	(252,869)	(138,144)	(1,698,598)
Purchased power savings (cost) - Mwh	4	Line 3 if diesel on margin (see Table 3, Row 10)	(376,221)	(317,636)	(455,993)	(319,889)	(5,047)	-	-	-	-	-	(223,889)	(138,144)	(1,856,176.00)
Standard efficiency	17	YEC - Line 17	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71
Standard loss	18	Line 4/Line 17	(108,852)	(85,815)	(125,698)	(88,223)	(3,360)	-	-	-	-	-	80,342	(37,236)	(600,506.25)
Standard price per Mwh	18	YEC - Line 18	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960
Fuel savings forecast - \$000	20	Line 18 x Line 19	(31,832.20)	(26,345.86)	(37,181.18)	(25,526.28)	(402.81)	-	-	-	-	-	(17,863.52)	(11,023.29)	(148,168.50)
Variable O&M costs - \$000	21	YEC Line 21 x Line 4	8,342.74	15,082.16	17,455.41	15,116.23	80.75	-	-	-	-	-	(3,881.80)	(2,210.30)	(25,710.00)
Reserve buildup (drawdown) - \$000	22	Line 20 + Line 21	(17,874.93)	(30,427.77)	(44,636.60)	(30,643.50)	482.35	-	-	-	-	-	(21,445.42)	(13,233.59)	(177,878.50)
Opening reserve	23	Line 25 prior period	-	(7,874.93)	(85,402.78)	(113,038.36)	(143,682.86)	(143,189.50)	(143,189.50)	(143,189.50)	(143,189.50)	(143,189.50)	(143,189.50)	(184,844.82)	
Comprehensive reserve balance - \$000	25	Line 22 + Line 23	(17,874.93)	(88,402.78)	(113,038.36)	(143,682.86)	(143,189.50)	(143,189.50)	(143,189.50)	(143,189.50)	(143,189.50)	(143,189.50)	(184,844.82)	(177,878.50)	

1998 DCF CALCULATIONS			TABLE 1: YUBOR ENERGY CORPORATION - actual to Dec 31												
Continuity schedule, year ending Dec. 31, 1998 - Diesel Contingency Fund Calculations - WAF System (2000)			JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Annual generation - KWH		Line#													
Hydro	1	Manual Input	36,039,040	21,433,141	22,326,425	18,580,682	18,161,851	18,545,187	18,106,899	18,101,121	18,145,948	20,640,506	22,898,531	24,840,153	251,819,688
Wind	1a	Manual Input	14,800	31,080	28,880	21,870	32,370	13,290	17,800	22,260	21,790	23,190	10,310	14,520	258,590
Diesel	2	Manual Input	6,608,130		19,320		1,890	2,478	807,362	2,840	420	4,200	34,440	17,180	7,198,130
Total	3	Line 1 + Line 2	42,562,770	21,464,221	22,371,825	18,612,182	18,196,041	18,660,525	18,731,861	18,128,321	18,168,168	20,667,896	22,943,431	24,871,833	261,277,288
Forecast Generation - KWH	4	Manual Input	30,406,823	27,221,714	28,882,170	23,818,498	24,782,218	30,859,932	30,771,856	30,871,830	31,789,616	32,602,878	30,768,228	28,776,138	351,087,698.00
Hydro	4a	Manual Input	30,000	28,000	28,000	25,000	24,000	15,000	16,000	20,000	25,000	30,000	30,000	30,000	300,000.00
Wind	4a	Manual Input	11,839,448	10,561,288	11,837,582	11,554,238	9,502,321	1,203,010	1,346,954	1,350,612	1,442,875	3,611,795	7,895,231	11,851,208	84,205,322.00
Diesel	5	Manual Input	41,278,089	38,310,982	38,957,783	35,407,737	34,278,539	32,177,842	32,123,010	32,242,342	33,267,290	35,144,441	38,780,467	41,856,348	435,582,918.00
Total	6	Line 4 + Line 5													
Variance - KWH	7	Line 1 - Line 4	5,617,017	(6,285,493)	(4,887,855)	(6,231,325)	(8,531,857)	(14,418,436)	(14,882,457)	(12,788,448)	(13,698,878)	(11,968,840)	(7,898,235)	(4,850,685)	(87,308,240)
Hydro and wind	8	Line 2 - Line 5	(6,300,316)	(15,561,288)	(11,818,279)	(11,584,239)	(9,600,841)	(1,200,532)	(728,892)	(1,347,672)	(1,442,269)	(3,607,569)	(7,895,231)	(11,834,048)	(77,808,182)
Diesel	9	Line 3 - Line 6	286,701	(18,846,781)	(18,585,938)	(16,795,574)	(18,032,488)	(16,617,017)	(15,401,145)	(14,116,021)	(15,098,131)	(15,478,809)	(15,847,028)	(18,784,613)	(174,518,622)
Total Favorable															
Expected diesel generation - KWH	10	Manual Input													
Diesel on reserve (1=yes, 0=no)	10	Manual Input													
YEC generation replacement at low time average hydro capability	11	Line 5	11,839,448	10,561,288	11,837,582	11,564,238	9,502,321	1,203,010	1,346,954	1,350,612	1,442,875	3,611,785	7,895,231	11,851,208	84,205,322.00
Forecast generation	12	Line 8	286,701	(18,846,781)	(18,885,838)	(16,795,574)	(18,032,488)	(16,617,017)	(15,401,145)	(14,116,021)	(15,098,131)	(15,478,809)	(15,847,028)	(18,784,613)	(174,518,622.00)
Total variance	13	Line 11 + Line 12	12,126,147	(8,285,493)	(6,848,256)	(5,231,325)	(8,530,167)	(14,114,007)	(14,055,093)	(12,785,508)	(13,656,496)	(11,864,840)	(7,851,795)	(4,933,305)	(80,110,210.00)
Expected generation	14	Line 13 if Line 10=1, either=0	12,126,147												
Maximum surplus available	14a	Line 5	11,839,448	10,561,288	11,837,582	11,564,238	9,502,321	1,203,010	1,346,954	1,350,612	1,442,875	3,611,785	7,895,231	11,851,208	84,205,322.00
Actual diesel generation	15	Line 2	6,608,130		19,320		1,890	2,478	807,362	2,840	420	4,200	34,440	17,180	7,198,130.00
Diesel coverage (increase) (KWH)	16	Line 14-Line 15(max fine 14a)	5,617,017						(607,362)						
Standard efficiency (KWH)	17	Manual Input	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71
Standard efficiency (Dollars)	17	Manual Input							(183,705)						
Standard Price - DCF Price	18	Line 18 Line 17	1,514,021							0.2960	0.2960	0.2960	0.2960	0.2960	0.2960
Standard price (2 per Price)	19	Manual Input	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960
Reserve VA (Excluding interest)	20	Manual Input	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
YEC Variable O&M cost (\$ per Price)	21	Line 18 + Line 19	449,207.98						(48,464.21)						390,743.47
YEC Fuel storage (Excluding)	22	Line 20 + Line 16	89,872.27						(8,717.79)						81,154.48
YEC Variable O&M costs	23	Line 21 + 22	539,079.95						(57,182.00)						481,897.95
YEC building (Excluding)	24	See Table 2	(12,858.16)												(12,858.16)
YEC building (Excluding)	24	See Table 2													
Total building (Excluding)	25	Line 23 + 24	626,121.77						(56,182.00)						569,939.77
Reserve balance (Excluding interest and service fees)	26	Line 26 prior period	2,636,909.28	3,380,131.15	3,380,131.15	3,380,131.15	3,380,131.15	3,380,131.15	3,380,131.15	3,380,131.15	3,380,131.15	3,058,128.35	2,759,812.80	2,422,325.99	488,839.77
Beginning reserve	27	Line 25	626,121.77						(56,182.00)			(302,002.80)	(298,315.85)	(237,488.51)	(1,283,018.79)
Reserve Building (Excluding)	28								56,182.00						56,182.00
Rider adjustment	28														
Forecast fuel impact	28														
Ending reserve balance	30	Line 26 + 27 + 28 + 29	3,380,131.15	3,380,131.15	3,380,131.15	3,380,131.15	3,380,131.15	3,380,131.15	3,380,131.15	3,380,131.15	3,058,128.35	2,759,812.80	2,422,325.99	2,077,112.39	
Interest Calculations	31		4.78%	4.82%	5.01%	5.11%	5.12%	5.13%	5.03%	4.48%	6.18%	6.83%	5.80%	5.58%	
Monthly interest rate	31														
Monthly interest earned	32	(Line 30 * 360) * rate * (Days/360)	12,688.00	12,894.00	14,342.00	14,184.00	14,738.00	14,307.00	14,509.00	12,987.00	16,606.00	14,710.00	12,676.00	10,986.00	165,205.00
Service fees	33		(1,250.89)	0.00	0.00	(1,780.61)	0.00	0.00	(1,480.05)	0.00	0.00	(1,466.87)	0.00	0.00	(8,538.42)
Net interest earned	34	Line 32 + 33	10,735.11	12,894.00	14,342.00	12,403.39	14,738.00	14,307.00	13,028.95	12,987.00	16,606.00	13,243.03	12,676.00	10,986.00	156,666.58
Derivative net interest earned	35		10,735.11	23,428.11	37,771.11	60,174.80	84,512.60	78,219.60	92,288.95	106,255.55	121,761.55	135,004.58	147,680.58	158,646.58	
Ending reserve balance including interest	36	Line 30 + 35	3,570,868.28	3,381,560.28	3,297,802.26	3,410,305.76	3,425,643.76	3,439,950.75	3,452,396.70	3,465,286.70	3,178,889.90	2,894,817.88	2,570,086.57	2,226,758.87	

TABLE 2: THE YUKON ELECTRICAL COMPANY LIMITED - Annual to Dec 31																
Continuity schedule, year ending Dec. 31, 1999 - Diesel Contingency Fuel Calculations - WAF System (\$000)																
		Line #	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	
<b>Actual generation - Mwh</b>																
Hydro	1	Marred input	721,780	580,440	665,200	667,890	557,780	360,160	390,080	363,280	279,960	255,230	271,870	467,800	5,661,230	
<b>Forecast generation - Mwh</b>																
Hydro	2	Marred input	857,061	850,258	791,803	819,588	798,240	838,206	835,688	876,441	865,305	847,859	819,499	840,944	10,041,844	
<b>Variance - Mwh</b>																
Hydro	3	Line 1 - Line 2	(135,271)	(269,818)	(128,403)	(151,909)	(240,460)	(478,146)	(445,610)	(512,181)	(585,345)	(592,629)	(547,579)	(373,144)	(4,480,614)	
<b>Purchased power savings (\$000) - Mwh</b>																
	4	Line 3 B fixed on margin (see Table 1, See 10)	(135,271)	-	-	-	-	-	-	-	-	-	-	-	(135,271.00)	
<b>Standard efficiency</b>																
	17	YEC - Line 17	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	
<b>Standard Price</b>																
	18	Line 4, Line 17	(36,481)	-	-	-	-	-	-	-	-	-	-	-	(36,481.18)	
<b>Standard price per ftwh</b>																
	19	YEC - Line 18	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	0.2960	
<b>Fuel savings forecast - \$000</b>																
	20	Line 19 x Line 18	(10,782.84)	-	-	-	-	-	-	-	-	-	-	-	(10,782.84)	
<b>Variable O&amp;M costs - \$000</b>																
	21	YEC Line 21 x Line 4	(2,184.36)	-	-	-	-	-	-	-	-	-	-	-	(2,184.36)	
<b>Reserve buildup (drawdown) - \$000</b>																
	22	Line 20 + Line 21	(12,967.18)	-	-	-	-	-	-	-	-	-	-	-	(12,956.18)	
<b>Opening reserve</b>																
	23	Line 25 prior period	-	(12,958.18)	(12,958.18)	(12,958.18)	(12,958.18)	(12,958.18)	(12,958.18)	(12,958.18)	(12,958.18)	(12,958.18)	(12,958.18)	(12,958.18)	(12,958.18)	
<b>Cumulative reserve balance - \$000</b>																
	25	Line 22 + Line 23	(12,956.18)	(12,958.18)	(12,958.18)	(12,958.18)	(12,958.18)	(12,958.18)	(12,958.18)	(12,958.18)	(12,958.18)	(12,958.18)	(12,958.18)	(12,958.18)	(12,958.18)	



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EXHIBIT B-19

October 7, 1999

BY FAX: (867) 668-6213 & (867) 667-5059

Mr. Brian Morris, Chair  
Yukon Utilities Board  
P.O. Box 6070  
#19, 10014 – 1<sup>st</sup> Avenue  
Whitehorse, YT Y1A 5L7

Dear Mr. Morris:

Post-It™ Fax Note	7671E	Date	99/10/07	# of pages	14
To	Intervenors	From	Darlene Morgan /		
Co./Dept.		Co.	Rob McWilliam - Yec		
Phone #		Phone #	393-5336		
Fax #		Fax #	393-5323		

**Re: Comments on the Diesel Contingency Fund Report**

This letter provides additional comments on the Diesel Contingency Fund (DCF) Report that Yukon Energy filed with the Board on June 2, 1999.

In response to your letter of August 3, 1999, we include, as set out below, comments on the July 4, 1999 submission from the Utilities Consumers' Group (UCG). We also include, as Attachment A to this letter, additional background information on questions that may assist the Board in its review of the DCF filings for 1996 to 1998. Finally, as explained below, we also provide a correction to the row label text in certain tables of the DCF Report.

*Correction to row label text – no impact on numbers or conclusions*

We have noted an error in the row labeling of the tables attached to the DCF Report, which is corrected in the attached set of tables. The error (Variable Diesel O&M costs were incorrectly listed at 1.6¢ per litre instead of the correct value of 1.6¢ per kWh) does not change the values, calculations, balances or conclusions of the report. The error was also present in the text of the report at page 3, bullet (e) where the variable diesel O&M should also be listed as 1.6¢/kWh instead of 1.6¢ per litre. We have provided a corrected copy of Tables 1 through 3 as provided in the earlier report, and Yukon Energy's detailed Table 1 from each of the three years reviewed.

*Comments Received to date on the DCF Report*

The DCF Report has been provided to the Board pursuant to the 1996/97 Settlement Agreement. The Companies have complied with the terms of the Settlement Agreement in that they previously filed the appropriate reports with the Board for 1996 and 1997. The latest report provides the same information for 1998, along with certain revisions with respect to the earlier reports.

October 7, 1999

Mr. Brian Morris, Chair  
Yukon Utilities Board

**Re: Comments on the Diesel Contingency Fund Report**

Page 2

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The Board has made provision to receive comments from any interested parties with respect to the recent DCF Report. We believe that the approach taken by the Board to date provides accountability that is consistent with the Negotiated Settlement Agreement. To date, the only written comments we have received from intervenors are those provided by the UCG letter of July 4, 1999.

In order to assist the Board we provide the following comments on the specific concerns raised by UCG:

- (a) **UCG requested further explanation and clarification of the Aishihik OIC and its effect on the DCF:** In response, additional information is provided below.

The Aishihik OIC (OIC 1997/13) affected the DCF only during the first quarter of 1997. Actual generation for the first quarter for YEC is shown in the DCF Report for 1997 after adjustments to reflect the impact of this OIC.

In total, 37,000 MWh was added to Hydro generation (actual) and 37,000 MWh was reduced from Diesel generation (actual) to reflect the impact of the OIC. In essence, the OIC compensated YEC for not using the bottom two feet of licensed water level storage at Aishihik Lake. The net effect of the above adjustments to the 1997 DCF Report ensured that the DCF was calculated on the assumption that the bottom two feet of licensed water level had been used to provide added Hydro generation during the first quarter of the year.

We note that this point was also set out in the response to UCG-YEC-1-8 in the 1998 Hearing, and was also addressed in our recent letter on fuel price variance 1997 finalization. As noted in the earlier response during the 1998 Hearing, the overall impact was to reduce YEC fuel related extra costs charged to the DCF by approximately \$2.95 million and to also reduce YEC variable O&M costs charged to the DCF by approximately \$0.59 million.

- (b) **UCG requested further explanation and clarification of the fire-related impacts on the DCF:** Further explanation and clarification is provided below.

The DCF Report provides extensive information and comment on fire-related impacts on the DCF. These are reviewed below:

- i) **1997 fire-related impacts:**  
Actual diesel generation for YEC was required during three months of 1997 (October through December) due to reduced Hydro capability caused by the 1997

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Mr. Brian Morris, Chair

Yukon Utilities Board

**Re: Comments on the Diesel Contingency Fund Report**

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fire at the Whitehorse Rapids hydro facility. These fire impacts were estimated in detail for each month in the tables attached to the Report, and commented on in Note 5 to the first table.

In essence, the 1997 DCF calculations for these months were revised to reflect the reduced Hydro capability resulting from the loss of Hydro generating units due to the fire. Under the terms of YEC's insurance policy there is a 30-day waiting period during which the cost of any fire-related diesel generation is not claimable.

Accordingly, the DCF drawdown for October and November 1997 due to the fire was charged to the YEC Reserve for Injuries and Damages (as detailed in the tables to the Report, this impact equaled \$403,052.95 for these two months combined). The DCF drawdown for December 1997 due to the fire has been charged to the fire insurance claim (as noted in the tables to the Report, this equaled \$113,114.28). In total, fire-related impacts equal to \$516,167.23 were removed from the costs charged to the DCF in 1997.

ii) **1998 fire-related impacts:**

During July 1998, YEC experienced a major forest fire that shut down the Faro transmission line for some time forcing YEC to generate diesel from the Faro plant. This diesel generation impact had nothing to do with Hydro generation capability, and thus cannot be charged to the DCF. As noted in the table attached to the Report titled "DCF Continuity Schedule 1996 - 1998", this forest fire impact on the DCF of \$58,182.00 for July 1998 has all been charged to the Reserve for Injuries and Damages.

(c) **UCG requested further explanation and clarification of the Company's assumption and decision of where and when they can use forecasted versus actual numbers:**

The DCF has been operated on the same basis as the Low Water Reserve Fund (LWRF) previously in place from 1991 through 1995, except for the material differences specified in the 1996/97 Settlement Agreement. In accordance with these procedures, the DCF Report sets out both actual and forecast generation numbers for the purpose of each year's calculations. This approach has been utilized throughout the history of the LWRF, and is explained further below. Additional background information is provided in Attachment A attached to this letter.

The DCF is intended to offset diesel generation cost changes for the WAF system that are caused solely by variances from long term average levels of WAF system hydro and wind generation. The forecast generation for hydro and wind reflects the appropriate long-

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Mr. Brian Morris, Chair  
Yukon Utilities Board

**Re: Comments on the Diesel Contingency Fund Report**

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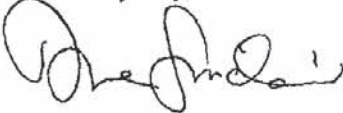
term average levels, as confirmed in the Negotiated Settlement Agreement. The forecast diesel generation for 1996 and 1997 reflects the balance of forecast generation requirement to meet the forecast load as set out in the GRA as approved by the Board.

The WAF diesel generation costs per kWh are based on the 1996 forecast as set out in the GRA (standard efficiency for diesel generation units use of fuel, YEC average WAF diesel fuel price forecasts, and the variable O&M diesel generation costs per kWh). For the 1998 DCF, the forecasts adopted for 1997 were retained. The same approach as adopted for 1998 will be used for any subsequent years until such time as the Board approves new forecasts.

The 1998 DCF Report noted that the Companies expect to prepare a submission to the YUB regarding the operation of the DCF for 1999 and beyond. When this submission is prepared, we would expect that the Board will seek comments from interested parties such as UCG and other Intervenor. This will provide additional opportunity to assess any issues related to the ongoing operation of the DCF for 1999 and subsequent years.

Based on the comments to date, we believe that the Board has the information required to approve the 1998 DCF as filed as well as the revised DCF schedules for 1996 and 1997. If you have any further questions, we would be pleased to assist you.

Yours very truly,



Rob McWilliam  
President and Chief Executive Officer

/dm  
Attachments

c Intervenor

**ATTACHMENT A**  
**General Questions and Answers re: DCF**

**Why does Yukon need a Diesel Contingency Fund (DCF)?**

The Diesel Contingency Fund was created as a result of the Negotiated Settlement at the 1996/97 GRA. The DCF was to operate in the same manner as the earlier Low Water Reserve Fund (LWRF), established in the early 1990's, except for certain specified changes. The most notable adjustment was the use of long-term average water inflows, a change from the use of forecast hydro generation based on actual Aishihik water levels at the time of a rate application.

The question as to why a fund is needed at all was answered concisely in the report to the YUB in April 1997 prepared by the Accounting firm Stephen Johnson, as follows:

*"In certain jurisdictions, electric power is generated at hydro dams or run-of-the-river hydro operations. Low Water Reserves have been established to protect customers against short-term fluctuations in the cost of electricity when more costly sources of generation, such as diesel, are substituted for hydro generation at times of low water conditions behind the dams or in the rivers. Simply, lower than average water level conditions generally result in higher diesel generation costs..."*

*"Given that the reserve is a vehicle for smoothing the cost fluctuations due to water level divergence from average, it is set up so that it can be drawn down to offset the costs of diesel generation in years of low water levels."*

In addition, the DCF is set up so as to be replenished in years of high water levels. The result is better rate stability and predictability for both customers and utilities.

The 1996/97 Settlement Agreement provided for the operation of the fund as follows:

*"The fund is to operate outside the rate base but an annual report detailing additions and deletions to the fund is to be filed with the Board so that the Board may oversee the fund activities. The Board will direct the Companies on the additions and deletions to the fund."*

**How does the DCF work?**

The DCF operates based on a concept of "expected diesel generation". This expected diesel generation is calculated based on long-term average hydro generation and actual electricity consumption in any given period. It is the amount of diesel that one would expect to be required based on these two values. The DCF is either drawn down or replenished when actual diesel generation varies from the "expected" level due to water flow variances.

**General Points Re: Approved DCF – Expected Diesel Generation**

As noted earlier, the DCF as approved in the 1996/97 Settlement Agreement is to be operated on the same basis as the earlier LWRF, except for material changes specified in the 1996/97 Settlement Agreement. The concepts and calculation methods for "expected diesel generation" were already established in the LWRF, as previously approved by the Board, for months when the Faro mine was operating and diesel generation was clearly on the margin under forecast water flow conditions.

For simplicity, the following comments ignore wind generation variances, which became incorporated in the DCF as part of the 1996/97 Settlement Agreement.

**General Points Re: Approved DCF when Faro Mine is Operating**

To review the basis for "expected diesel generation" assessments when the Faro mine is operating, it is important to note that both the LWRF and the DCF address variances in the cost of diesel generation related solely to hydro generation variations from long-term averages that are due to hydro capability variances (e.g., water flows variances). The LWRF and DCF do not address other reasons for diesel generation cost variances (e.g., the DCF does not address diesel generation cost variances from forecasts due to fluctuations in sales or overall generation requirements, variances in fuel prices, or variances in diesel plant efficiencies or average O&M costs per kWh).

In order to determine how variances from long-term hydro generation capability affect diesel generation costs on a monthly basis, the LWRF specified that the following information would be used (the DCF assumes that forecast hydro generation is based on approved long-term averages):

- the forecast and actual WAF total generation requirement (WAF load)
- the forecast and actual WAF generation by source (hydro, wind, and diesel in the DCF).

The diesel generation variance from forecast can reflect a number of factors. For example, diesel generation can be affected by variances in WAF load from forecast as well as by diesel generation changes resulting from other factors not related to water flow variances.

Using an example, assume we forecast 50 GW.h of total WAF load, of which 10 GW.h is from diesel, and that actual usage is 60 GW.h of WAF load with 20 GW.h from diesel. Under these assumptions, the "expected diesel generation" methods adopted in the LWRF and retained in the DCF assume that this variance in diesel generation is not due to variance in water flows from long-term averages, despite the fact that diesel usage was 10 GW.h more than forecast. The process works likewise for a drop in system load. If we were to take the above case and argue that the diesel generation varied due to water flows it would not only be incorrect; it would elicit a payment for 10 GW.h of diesel generation costs from the fund – clearly inappropriate considering hydro and wind generation performed exactly as forecast at 40 GW.h.

Instead of using only diesel variance, the LWRF and DCF use a new figure, the "expected" diesel generation. In the above example we had forecast diesel generation at 10 GW.h plus a WAF system variance of +10 GW.h, so assuming everything else in the system operates as per forecast (including the level of water flows), the expected diesel generation would be 20 GW.h. This leaves a diesel savings/excess of 0 GW.h and no change to the fund balance.

"Expected diesel generation" is not directly affected by actual diesel generation. For example, assuming the same above forecast example (forecast 50 GW.h on the system with 10 GW.h from diesel generation) and actuals of 60 GW.h on the system with only 15 GW.h from diesel generation, the LWRF and DCF would retain the 20 GW.h expected diesel generation. In this case, however, the LWRF and DCF calculate diesel savings of 5 GW.h and the fund would thus be credited for the value of 5 GW.h of diesel generation cost savings. This is because the diesel generation variance from expected is -5 GW.h even though the diesel generation variance from forecast is +5 GW.h.

The LWRF and DCF also both ensure that diesel generation savings cannot exceed actual diesel generation.

It is not contemplated that "expected diesel generation" could ever be negative when the Faro mine is operating so long as YEC retains its current WAF hydro generation capability. Further, as reviewed below, the LWRF and DCF both assume that "expected generation" for diesel plant is zero when the Faro mine is not operating.

**General Points Re: Approved DCF when Faro Mine is Not Operating**

Once the Faro mine is off the system, the expected WAF diesel energy generation drops to zero for the purpose of the LWRF or DCF. This is because the removal of this one load is sufficient to ensure, under current WAF load conditions and assuming long-term hydro generation capability, that WAF energy generation requirements can be met without diesel energy generation.

In actual fact, during significant periods of low water, such as the winter of 1998/99, diesel may be required for baseload WAF generation, and it is the intention of the DCF to address these variances from the "expected" level due to water flow variations. (Experience has shown that some minor level of diesel generation may also be needed, even when the Faro mine is closed, for peaking, voltage stability, or other purposes that are not affected by variances from forecast hydro generation capability. Accordingly, neither the LWRF nor the DCF consider these diesel generation requirements.)

These principles are reflected in the simple binary choice set out at line 10 of the DCF report table (YEC) for each month. When the Faro mine is operating, the "1" at line 10 indicates that diesel generation is assumed to be on the margin under long-term hydro generation conditions. When the Faro mine is not operating, the "0" indicates that diesel generation is assumed not to be on the margin under long-term hydro generation conditions.

The binary choice of "0" at line 10 dictates an "expected generation" for diesel of "0" at line 14. Under no condition can "expected generation" be set at less than "0" under the approved LWRF or DCF.

Even though the LWRF was completely suspended in 1993/94 when the Faro mine was closed, it was known that actual diesel generation may still be required under these conditions. Further, it was recognized during the 1993 GRA hearing that low water conditions could be one of the factors that necessitate such diesel generation – and that the LWRF would be expected to compensate for diesel costs incurred solely due to such low water conditions even when the Faro mine is closed. During the winter of 1998/99, with the Faro mine closed, actual low water conditions did result in baseload diesel being required, and the DCF was used in 1999 to address this variance.

The current DCF calculations recognize that small amounts of actual diesel generation may be required when the Faro mine is closed for purposes unrelated to variances from long-term hydro capability. In order to address this factor when the Faro mine is closed, the DCF is not activated in any such month when actual diesel generation does not exceed 250 MW.h (this assessment is done at line 16 of the DCF report table for YEC). Any such month with lower than 250 MW.h of diesel generation is assumed to have no diesel generation cost for the purposes of calculating the DCF.

#### **How is 'Diesel on the Margin' Defined?**

Diesel on the margin is a concept used to represent the significant impact that the operation of the Faro mine has on the Yukon electrical system. Diesel-on-the-margin is indicated in the calculations of the DCF at line 10 of the DCF report table for YEC, with a 1 indicating the Faro mine is operating and a 0 indicating the mine is shut-down. The definition of diesel on the margin at line 10 is not dependent on actual diesel generation.

Using a hypothetical example once again, assume WAF system load forecast at 50 GW.h with 10 GW.h of diesel and 40 GW.h of hydro. Assume the actual load is very low at 35 GW.h due to closure of the Faro mine (i.e., at a level where energy needs could be met solely by hydro generation at normal water flows). Finally, assume actual hydro generation is also low because of low water, at 30 GW.h. This means 5 GW.h of diesel was required. In this case, diesel is not "on the margin" at line 10 – actual load is 35 GW.h with a forecast hydro capability of 40 GW.h and there is thus no "expected" need for diesel generation. Since "expected" diesel generation is zero, the actual diesel at 5 GW.h is due to lower than average water flows, and the fund would be drawn down for the value of this generation, as would be expected based on low hydro generation.

Actual hydro generation also does not affect whether diesel is "on the margin" at line 10. It does play a significant role, however, in determining the charges or credits affecting the DCF at line 16.

#### **Why Would the Fund Pay Out When Diesel is Less Than Forecast?**

The rationale for drawing down the fund in some months when actual diesel is lower than originally forecast is the assessment that the actual diesel generation was required solely due to low water flow conditions (or other factors that similarly reduced hydro capability below long-term average capabilities).

Looking at the example used in the response to the above question, we can see that actual diesel at 5 GW.h is less than forecast diesel at 10 GW.h. However, actual hydro is also much lower than originally forecast. The variance in water flows is the cause of the 5 GW.h in diesel being needed (rather than no diesel being needed as would be "expected"). In this case the use of the DCF is called for.

There are conditions when the Faro mine is operating when the fund could also be drawn down even though actual diesel generation is less than forecast. Here again, the critical factor is "expected diesel generation" rather than only forecast diesel generation.

Conversely, there can be conditions, such as January, 1996, when diesel use is greater than forecast, but the fund is still credited due to hydro generation above what would be expected with average water flows.

#### **Why Does the Calculation Use "Expected" Diesel Generation?**

The above information outlines the calculation of the "expected" diesel generation. It is what one would expect to be required based on long-term average hydro and actual monthly system load. The principles were established earlier in the LWRF and have simply been retained in the DCF.

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The rationale for not basing this number solely on forecast or actual diesel generation has been explained above.

Expected generation is always used as the starting point for diesel savings calculations at line 16 of the DCF table for YEC – whether diesel generation is on the margin or off the margin at line 10. The line 16 calculation deducts actual diesel generation from “expected generation”, subject to the constraint noted at line 14a.

By definition, diesel being off the margin at line 10 means there is zero expected diesel generation at line 14.

In contrast, if simple diesel generation variance from actual was used, it would result in the fund adjusting for the costs of all variances from forecast – including load variances – not just those relating to water flows. It would be contrary to the purpose of the DCF, the former LWRF, and the intent of the 1996/97 Negotiated Settlement.

Q&A.doc 07/10/99

**Table 1: DCF - including Fire Related Diesel Generation:**  
 (corrected September, 1999)

Line#			OCT-1997	NOV-1997	DEC-1997
	<b>Actual generation - Mwh</b>				
1	Hydro	Manual Input	26,580,490	27,851,195	33,708,072
1a	Wind	Manual Input	17,840	6,530	21,370
2	Diesel	Manual Input	357,870	7,140,520	6,747,710
3	Total	Line 1 + Line 2	26,956,200	34,798,245	40,476,152
	<b>Forecast Generation - Mwh</b>				
4	Hydro	Manual Input	32,502,878	30,785,228	29,775,188
4a	Wind	Manual Input	30,000	30,000	30,000
5	Diesel	Manual Input	3,611,765	7,995,231	11,851,208
6	Total	Line 4 + Line 5	36,144,643	38,780,457	41,656,396
	<b>Variance - Mwh</b>				
7	Hydro and wind	Line 1 - Line 4	(8,934,346)	(3,137,501)	3,922,304
8	Diesel	Line 2 - Line 5	(3,253,895)	(654,711)	(5,103,498)
9	Total (favourable)	Line 3 - Line 6	(10,188,241)	(3,892,212)	(1,181,194)
	<b>Expected diesel generation - Mwh:</b>				
	Greater of (savings to a maximum of forecast diesel):				
10	Diesel on margin (1=yes, 0=no) (YEC generation requirement long term avg Hydro capability)	Manual Input	0	1	1
11	Forecast generation	Line 5	3,611,765	7,995,231	11,851,208
12	Total variance	Line 9	(10,188,241)	(3,992,212)	(1,181,194)
13		Line 11 + Line 12	(6,576,476)	4,003,019	10,670,014
14	Expected generation	Line 13 if Ln 10=1 other = 0	-	4,003,019	10,670,014
14a	Maximum savings available	Line 5	3,611,765	7,995,231	11,851,208
15	Actual diesel generation	Line 2	357,870	7,140,520	6,747,710
16	Diesel savings (excess) (Mwh)	Line 14-Line 15 (max line 14a if Ln 10=1; otherwise = 0, unless Ln 15 >250,000)	(357,870)	(3,137,501)	3,922,304
17	Standard efficiency(kwh/l)	Manual Input	3.71	3.71	3.71
18	Standard litres - 000 litres	Line 16/Line 17	(98,481)	(845,888)	1,057,225
19	Standard price(\$ per litre)	Manual Input	0.2980	0.2980	0.2980
	<b>Reserve Buildup (drawdown)</b>				
20	YEC Variable O&M costs(\$ per kW.h)	Manual Input	0.016	0.016	0.016
21	YEC Fuel savings (excess)	Line 16 x Line 19	(28,656.10)	(250,355.67)	912,976.71
22	YEC Variable O&M costs	Line 20 x Line 16	(5,725.92)	(50,200.02)	62,758.88
23	YEC buildup (drawdown)	Line 21+22	(34,282.02)	(300,555.69)	375,735.57
24	YECL buildup (drawdown)	See YECL Table	0	(21,445.42)	(13,233.58)
25	Total buildup (drawdown)	Line 23 +24	(34,282.02)	(322,001.11)	362,501.99

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**Table 2: DCF - Excluding Fire Related Diesel Generation;**  
 (corrected September, 1999)

Line#			OCT-1997	NOV-1997	DEC-1997
<b>Actual generation - Mwh</b>					
1	Hydro	Manual Input	25,840,460	31,500,795	34,866,872
1a	Wind	Manual Input	17,840	6,530	21,370
2	Diesel	Manual Input	87,870	3,290,920	5,586,910
3	Total	Line 1 + Line 2	25,958,200	34,798,245	40,475,152
<b>Forecast Generation - Mwh</b>					
4	Hydro	Manual Input	32,502,878	30,765,228	28,775,138
4a	Wind	Manual Input	30,000	30,000	30,000
5	Diesel	Manual Input	3,611,765	7,995,231	11,851,208
6	Total	Line 4 + Line 5	38,144,441	38,790,457	41,856,346
<b>Variance - Mwh</b>					
7	Hydro and wind	Line 1 - Line 4	(6,674,346)	712,089	5,103,104
8	Diesel	Line 2 - Line 5	(3,513,895)	(4,704,311)	(6,284,298)
9	Total (favourable)	Line 3 - Line 6	(10,188,241)	(3,992,212)	(1,181,194)
<b>Expected diesel generation - Mwh:</b>					
Greater of (savings to a maximum of forecast diesel):					
10	Diesel on margin (1=yes, 0=no)	Manual Input	0	1	1
(YEC generation requirement long term avg Hydro capability)					
11	Forecast generation	Line 5	3,611,765	7,995,231	11,851,208
12	Total variance	Line 9	(10,188,241)	(3,992,212)	(1,181,194)
13	Expected generation	Line 11 + Line 12	(6,576,476)	4,003,019	10,670,014
14	Expected generation	Line 13 if Ln 10=1 otherwise = 0	-	4,003,019	10,670,014
14a	Maximum savings available	Line 5	3,611,765	7,995,231	11,851,208
15	Actual diesel generation	Line 2	87,870	3,290,920	5,586,910
16	Diesel savings (excess) (Mwh)	Line 14-Line 15 (max line 14a if Ln 10=1; otherwise = 0, unless Ln 15 >260,000)	-	712,089	5,103,104
17	Standard efficiency(kwh/l)	Manual Input	3.71	3.71	3.71
18	Standard litres - 000 litres	Line 16/Line 17	-	191,940	1,375,500
19	Standard price(\$ per litre)	Manual Input	0.2980	0.2980	0.2980
<b>Reserve Buildup (drawdown)</b>					
20	YEC Variable O&M costs(\$ per kW.h)	Manual Input	0.016	0.016	0.016
21	YEC Fuel savings (excess)	Line 16 x Line 19	-	58,821.66	407,200.19
22	YEC Variable O&M costs	Line 20 x Line 18	-	11,393.58	81,649.66
23	YEC buildup (drawdown)	Line 21+22	-	88,215.24	488,849.85
24	YECL buildup (drawdown)	See YECL Table	-	(21,445.42)	(13,283.58)
25	Total buildup (drawdown)	Line 23 +24	-	46,769.82	475,616.27

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YUKON ENERGY CORP.

→ INTRIGROUP - YUB

**Table 3: DCF - Fire Impact**  
 (corrected September, 1999)

Line#			OCT-1997	NOV-1997	DEC-1997
<b>Actual generation - Mwh</b>					
1	Hydro	Manual Input	260,000	3,849,800	1,180,800
1a	Wind	Manual Input	0	0	0
2	Diesel	Manual Input	(260,000)	(3,849,800)	(1,180,800)
3	Total	Line 1 + Line 2	0	0	0
<b>Forecast Generation - Mwh</b>					
4	Hydro	Manual Input	0	0	0
4a	Wind	Manual Input	0	0	0
5	Diesel	Manual Input	0	0	0
6	Total	Line 4 + Line 5	0	0	0
<b>Variance - Mwh</b>					
7	Hydro and wind	Line 1 - Line 4	260,000	3,849,800	1,180,800
8	Diesel	Line 2 - Line 5	(260,000)	(3,849,800)	(1,180,800)
9	Total (favourable)	Line 3 - Line 6	0	0	0
<b>Expected diesel generation - Mwh:</b>					
Greater of (savings to a maximum of forecast diesel):					
10	Diesel on margin (1=yes, 0=no)	Manual Input	0	1	1
(YEC generation requirement long term avg Hydro capability)					
11	Forecast generation	Line 5	0	0	0
12	Total variance	Line 9	0	0	0
13	Expected generation	Line 11 + Line 12	0	0	0
14	Expected generation	Line 13 if Ln 10=1 other = 0	0	0	0
14a	Maximum savings available	Line 5	0	0	0
15	Actual diesel generation	Line 2	(260,000)	(3,849,800)	(1,180,800)
16	Diesel savings (excess) (Mwh)	Line 14-Line 15 (max line 14a if Ln 10=1; otherwise = 0, unless Ln 15 >250,000)	357,870	3,849,800	1,180,800
17	Standard efficiency(kwh/l)	Manual Input	3.71	3.71	3.71
18	Standard litres - 000 litres	Line 16/Line 17	96,481	1,037,828	318,275
19	Standard price(\$ per litre)	Manual Input	0.2980		
<b>Reserve Buildup (drawdown)</b>					
20	YEC Variable O&M costs(\$ per kW.h)	Manual Input	0.018	0.018	0.018
21	YEC Fuel savings (excess)	Line 18 x Line 19	26,656.10	307,177.93	94,221.48
22	YEC Variable O&M costs	Line 20 x Line 18	5,725.92	61,693.60	18,692.80
23	YEC buildup (drawdown)	Line 21+22	34,282.02	368,770.93	113,114.28
24	YECL buildup (drawdown)	See YECL Table	-	-	-
25	Total buildup (drawdown)	Line 23 +24	34,282.02	368,770.93	113,114.28

Under the terms of the Insurance policy there is a 30 day waiting period during which the cost of any fire related diesel generation is not claimable. Accordingly the DCF drawdown for October and November was charged to the Reserve for Injuries and Damages. The DCF drawdown for December has been charged to the fire insurance claim.

1998 OCF CALCULATIONS - REVISED															
(forecasted September, 1998)															
TABLE 1: YUKON ENERGY CORPORATION - actual to Dec 31															
Contract schedule year ending Dec. 31, 1995 - Diesel Contract Fuel Calculations - WAF System (2000)															
	Line#	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	
<b>Actual Generation - kWh</b>															
Hydro	1	Manual Input	90,495,457	82,454,885	32,762,054	28,842,964	27,036,051	25,573,989	25,617,854	24,188,524	26,578,048	27,284,108	23,738,101	28,701,818	339,342,051
Wind	1a	Manual Input	(40)	38,083	86,730	18,110	17,215	6,890	11,380	27,270	12,000	25,580	30,120	233,170	
Diesel	2	Manual Input	17,177,780	28,092,878	5,688,079	6,977,420	7,005,540	7,243,822	4,829,044	3,182,720	8,295,620	10,750,280	16,729,380	14,727,000	104,598,540
Total	3	Line 1 + Line 2	47,843,177	38,985,878	38,976,984	34,982,494	30,685,024	30,758,012	31,277,691	30,225,638	37,800,328	40,515,048	44,492,608	44,129,511	
<b>Forecast Generation - kWh</b>															
Hydro	4	Manual Input	28,493,071	26,221,578	26,822,994	26,018,828	24,232,452	30,158,788	31,072,276	30,772,277	31,258,877	32,502,324	33,184,922	29,775,279	351,087,729.80
Wind	4a	Manual Input	30,000	28,000	28,000	25,000	24,000	15,000	20,000	25,000	20,000	33,000	30,000	30,000	300,000.00
Diesel	5	Manual Input	13,546,252	12,200,851	12,200,532	8,070,812	8,808,968	1,321,572	820,630	1,321,175	1,857,821	3,507,268	5,491,645	11,988,340	85,829,816.00
Total	5	Line 4 + Line 5	42,069,323	38,420,429	39,023,526	34,114,771	33,866,451	32,004,358	32,007,908	32,113,652	33,116,698	34,029,592	38,696,568	41,793,619	433,217,545.80
<b>Variance - kWh</b>															
Hydro and wind	7	Line 1 - Line 4	1,022,346	6,234,472	8,290,438	8,057,815	2,380,338	6,543,087	(5,762,254)	(2,582,336)	(2,734,958)	(5,432,201)	(9,433,202)	(7,224)	(11,815,590)
Diesel	8	Line 2 - Line 5	3,631,457	(5,111,323)	(6,512,452)	(3,088,420)	(2,561,420)	5,221,247	4,012,408	1,841,545	1,768,182	7,243,024	11,281,735	2,738,582	20,685,424
Total (variance)	9	Line 7 - Line 8	4,663,804	1,123,149	(8,221,014)	(5,030,605)	179,918	(1,261,214)	(1,249,846)	(746,761)	(966,776)	1,766,022	1,848,433	2,716,348	8,873,869
<b>Expected Diesel Generation - kWh</b>															
Greater of hydro to a maximum of forecast diesel															
Diesel on Hydro (Dyco Diesel)	11	Manual Input	1	1	1	1	1	1	1	1	1	1	1	1	
Dyco operation (not limited on long term average hydro capability)	12	Manual Input	13,546,252	12,200,851	12,200,532	8,070,812	8,808,968	1,321,572	820,630	1,321,175	1,857,821	3,507,268	5,491,645	11,988,340	85,829,816.00
Forecast generation	13	Line 11 + Line 12	4,680,717	1,220,142	(77,530)	838,823	179,940	(1,281,018)	(1,249,386)	(740,761)	(966,776)	1,769,823	3,828,433	2,716,348	8,873,869.00
Total variance	13	Line 11 + Line 12	18,207,106	13,442,800	12,122,999	9,909,635	9,938,808	690,255	(329,288)	(590,414)	(900,981)	5,288,029	7,233,078	14,854,736	92,703,781.00
Expected generation	14	Line 13 + Line 14 + Dyco Diesel	18,207,106	13,442,800	12,122,999	9,909,635	9,938,808	690,255	(329,288)	(590,414)	(900,981)	5,288,029	7,233,078	14,854,736	92,703,781.00
Maximum savings available	15a	Line 5	13,546,252	12,200,851	12,200,532	8,070,812	8,808,968	1,321,572	820,630	1,321,175	1,857,821	3,507,268	5,491,645	11,988,340	85,829,816.00
Actual diesel generation	15b	Line 2	17,177,780	28,092,878	5,688,079	6,977,420	7,005,540	7,243,822	4,829,044	3,182,720	8,295,620	10,750,280	16,729,380	14,727,000	104,598,540.00
<b>Diesel Savings (Forecast) kWh</b>															
Standard efficiency (kWh)	16	Line 14 - Line 15 (max line 14)	1,022,346	6,234,472	6,290,438	8,165,815	2,830,338	6,543,087	(5,262,354)	(2,582,336)	(2,734,958)	(5,432,201)	(9,433,202)	(7,224)	(11,815,590.00)
Standard efficiency (kWh)	17	Manual Input	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	
Standard Price - 000 \$/kWh	18	Line 16 x Line 17	277,452	1,646,181	1,892,649	1,085,173	782,810	(1,774,412)	(1,418,424)	(998,038)	(1,034,325)	(1,477,682)	(2,542,602)	(13,749)	(3,186,786.80)
Standard price (\$ per kWh)	19	Manual Input	0.259008	0.259038	0.259038	0.259038	0.259038	0.259038	0.259038	0.259038	0.259038	0.259038	0.259038	0.259038	0.259038
<b>Diesel Budget (Forecast) \$</b>															
YEC Variable O&M costs (see WAF)	20	Manual Input	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	
YEC Fuel (variable forecast)	21	Line 19 x Line 20	82,186.28	497,297.22	501,144.94	315,223.49	325,820.47	(25,282.28)	(419,907.47)	(208,054.11)	(217,405.08)	(457,450.98)	(752,726.82)	(5,843,989)	(462,817.67)
YEC Variable O&M costs	22	Line 20 x Line 20	18,488.29	86,735.22	109,036.58	40,228.00	45,296.96	(105,323.03)	(84,197.80)	(41,916.50)	(43,082.64)	(82,716.22)	(154,022.82)	(1,171.79)	(189,048.59)
YEC fuel (forecast)	23	Line 21 + Line 22	88,685.78	587,122.64	610,381.52	375,451.49	371,127.43	(210,126.33)	(304,114.31)	(249,972.60)	(260,488.62)	(539,167.20)	(906,739.64)	(7,013.58)	(651,866.26)
YEC fuel (forecast)	24	See Table 2	(27,881.82)	(28,149.32)	(18,252.59)	(25,982.84)	(14,055.85)	(17,829.11)	(39,249.04)	(40,342.30)	(13,588.78)	(21,417.17)	(38,650.46)	(22,237.39)	(325,803.92)
Total fuel (forecast)	25	Line 23 + Line 24	36,714.14	567,982.51	592,128.93	359,468.64	357,071.58	(648,451.45)	(543,363.41)	(59,729.40)	(274,537.31)	(558,587.87)	(945,388.11)	(47,752.77)	(1,457,670.14)
<b>Reserve Balance (Including Interest and Service Fees)</b>															
Beginning reserve	26		0.00	4,110,763.14	4,878,748.05	5,282,118.02	5,015,986.90	5,872,457.71	5,223,986.33	4,860,628.12	4,932,917.72	4,118,220.81	3,081,737.94	2,824,128.83	
Reserve Budget (forecast)	27	Line 25	70,714.14	567,982.51	592,128.93	359,468.64	357,071.58	(648,451.45)	(543,363.41)	(59,729.40)	(274,537.31)	(558,587.87)	(945,388.11)	(47,752.77)	(1,457,670.14)
Transfer LWOP balance	28		300,000.00											300,000.00	
YUB approved generation	29		3,540,948.00												
Ending reserve balance	30	Line 26 + Line 27 + Line 28	4,110,763.14	4,678,748.15	5,202,118.02	5,415,986.90	5,872,457.71	5,223,986.33	4,680,628.12	4,282,917.72	4,118,220.81	3,081,737.94	2,824,128.83	2,567,375.58	3,540,948.00
<b>Interest Calculations</b>															
Account interest rate	31		4.10%	4.10%	4.10%	4.10%	4.10%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	4.20%	
Monthly interest earned	32	(Line 30 x Line 31) x (days/30)	14,222.49	13,875.00	17,385.00	18,445.00	20,157.00	18,405.00	17,825.00	18,476.00	15,000.00	14,260.00	11,506.00	10,076.00	188,741.49
Service fees	33		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Net interest earned	34	Line 32 + Line 33	14,222.49	13,875.00	17,385.00	18,445.00	20,157.00	18,405.00	17,825.00	18,476.00	15,000.00	14,260.00	11,506.00	10,076.00	188,741.49
Cumulative net interest earned	35		14,222.49	28,097.49	45,482.49	63,927.49	84,084.49	102,489.49	121,314.49	137,591.49	152,857.49	165,157.49	178,662.49	188,741.49	
Ending reserve balance including interest	36	Line 30 + Line 35	4,124,985.63	4,702,623.14	5,207,610.51	5,679,324.39	5,958,922.36	5,277,470.82	4,602,007.81	4,530,815.21	4,271,217.80	3,298,243.94	3,002,781.52	2,771,118.75	

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987 DCF CALCULATIONS - REVISED		(contracted September 1988)													
TABLE 1: YUKON ENERGY CORPORATION - actual to Dec 31		Monthly schedule year ending Dec 31, 1987 - Great Chertsey Field Calculations - WAF System (9800)													
	Line#	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	
<b>Actual Generation - kWh</b>															
Hydro	1	35,245,105	30,041,842	27,482,187	12,178,813	16,758,088	11,159,292	16,407,642	17,658,478	20,986,251	25,590,026	27,801,185	38,736,072	289,538,643	
Wind	7a	30,245	22,216	25,280	21,820	18,840	19,580	7,580	18,180	25,370	17,840	8,520	7,140,520	23,000	
Waste	2	9,325,280	4,277,880	9,025,200	8,851,820	1,285,070	1,280	53,010	8,810	86,650	557,870	7,865,290	8,742,716	48,913,848	
Total	3	44,600,725	34,341,842	36,482,417	20,980,153	18,078,008	18,178,142	16,504,482	17,884,228	20,808,451	25,955,700	34,738,242	40,475,152	229,854,053	
<b>Forecast Generation - kWh</b>															
Hydro	4	30,406,624	27,771,714	24,992,170	23,814,498	24,702,216	30,878,932	30,771,958	30,871,630	31,798,815	34,526,678	30,765,228	29,775,136	261,047,986.00	
Wind	4a	30,000	20,000	24,000	25,000	24,000	15,000	15,000	20,000	25,000	20,000	30,000	20,000	300,000.00	
Waste	5	11,859,625	10,961,268	11,597,993	11,584,288	8,520,321	1,233,010	1,348,054	1,360,512	1,452,875	3,811,785	7,865,290	11,291,228	84,205,320.00	
Total	5	42,379,008	38,373,842	36,597,763	35,407,787	34,229,539	32,177,842	32,133,010	32,242,242	33,257,290	38,148,441	38,790,497	41,866,246	485,552,918.00	
<b>Variance - kWh</b>															
Hydro and wind	7	4,840,822	2,314,138	437,947	(1,645,285)	(7,948,582)	(14,803,052)	(14,201,484)	(19,016,212)	(11,212,754)	(8,634,346)	(8,127,501)	3,922,324	(70,514,822)	
Waste	8	(2,514,199)	(8,285,218)	(2,571,203)	(4,702,315)	(3,298,851)	(1,201,759)	(1,289,040)	(1,341,820)	(1,346,045)	(3,283,895)	(854,711)	(5,108,488)	(29,613,942)	
Total (Favorable)	9	2,326,623	(5,971,080)	(2,133,256)	(6,344,590)	(11,247,432)	(16,004,811)	(15,490,524)	(14,358,116)	(12,658,839)	(11,948,241)	(13,992,712)	(1,186,164)	(100,228,764)	
<b>Expanded (Forecast) Generation - kWh</b>															
Forecast generation	10	Manual Input	1	1	1	1	1	1	1	1	1	1	1	1	
Forecast generation	11	Line 5	11,629,446	10,561,268	11,207,528	11,204,238	9,592,291	1,208,010	1,340,050	1,350,512	1,442,675	3,811,785	7,865,290	11,851,208	84,205,320.00
Forecast generation	12	Line 9	2,208,689	(2,568,140)	(2,475,848)	(15,842,584)	(16,156,838)	(16,004,800)	(15,624,528)	(14,362,114)	(12,854,939)	(16,183,211)	(8,892,252)	(1,181,134)	(29,613,942)
Total variance	13	Line 11 + Line 12	14,186,132	6,592,128	9,622,247	(3,788,346)	(16,858,212)	(16,801,788)	(14,272,476)	(13,007,602)	(11,211,616)	(8,376,476)	4,000,019	10,670,074	(5,408,622)
Expanded generation	14	Line 12 @ Line 10(1) + wind	14,158,112	6,592,128	9,622,247	11,584,238	9,592,291	1,208,010	1,340,054	1,350,512	1,442,675	3,811,785	7,865,290	11,851,208	84,205,320.00
Maximum available available	14a	Line 5	11,823,646	10,581,268	11,201,500	11,584,238	9,592,291	1,208,010	1,340,054	1,350,512	1,442,675	3,811,785	7,865,290	11,851,208	84,205,320.00
Actual forecast generation	15	Line 7	6,025,200	4,277,880	9,025,200	8,851,820	1,285,070	1,280	53,010	8,810	86,650	557,870	7,140,520	45,101,280.00	
Class savings (percent) (CWA)	16	Line 14 & Line 15 (max line 14a)	4,645,622	2,314,138	437,947	(1,645,285)	(7,948,582)	(14,201,484)	(19,016,212)	(11,212,754)	(8,634,346)	(8,127,501)	3,922,324	(70,514,822)	
Standard efficiency (wh/wh)	17	Manual Input	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	3.71	
Standard Cost - \$00 (line)	18	Line 16 @ Line 17	1,304,804	623,757	117,802	(1,849,514)	(345,158)	-	-	-	(36,491)	(845,688)	1,067,225	(87,201,155)	
Standard price (\$ per kWh)	19	Manual Input	0.2980	0.2980	0.2980	0.2980	0.2980	0.2980	0.2980	0.2980	0.2980	0.2980	0.2980	0.2980	
<b>Balance Budget (drawdown)</b>															
YEC Variable O&M costs (\$ per kWh)	20	Manual Input	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	
YEC Variable O&M costs (\$ per kWh)	21	Line 18 + Line 19	286,271.30	184,026.74	34,873.80	(547,544.23)	(163,383.54)	-	-	-	(24,568.18)	(250,255.82)	312,978.71	(11,239.20)	
YEC Variable O&M costs	22	Line 20 + Line 18	27,625.15	27,008.21	6,822.75	(139,780.72)	(26,725.92)	-	-	-	(5,725.92)	(50,705.05)	42,758.86	(2,218.51)	
YEC Variable O&M costs	23	Line 21 + 22	483,726.65	221,661.95	41,586.74	(687,324.95)	(190,109.46)	-	-	-	(30,291.84)	(275,960.87)	355,737.57	(13,457.71)	
YEC Variable O&M costs	24	Line 23 + 24	(71,904.98)	(30,477.77)	(44,286.98)	(30,543.50)	(483.38)	-	-	-	(2,446.42)	(22,001.11)	360,501.96	(191,121.70)	
Total balance (drawdown)	25	Line 23 + 24	425,749.96	191,254.14	(2,718.98)	(647,978.44)	(123,006.18)	-	-	-	(24,288.02)	(222,001.11)	360,501.96	(191,121.70)	
<b>Revenue balance (including interest and service fees)</b>															
Beginning reserve	26	Line 26 prior period	2,771,116.25	3,106,882.41	3,384,170.58	3,385,359.79	2,887,872.28	2,573,788.18	2,573,788.18	2,487,483.00	2,224,773.88	2,227,480.57	2,227,480.57	2,274,280.53	
Revenue (including interest)	27	Line 25	425,749.96	191,254.14	(2,718.98)	(647,978.44)	(123,006.18)	-	-	-	(24,288.02)	(222,001.11)	360,501.96	(191,121.70)	
YUB 187777 Drawdown	28		-	-	-	-	-	(10,383.19)	(245,709.61)	2,717.18	-	-	-	(245,709.61)	
YEC line input	29		-	-	-	-	-	-	-	-	34,282.02	398,770.88	113,114.28	515,167.28	
Ending reserve balance	30	Line 26 + 27 + 28 + 29	3,196,866.41	3,288,120.58	3,381,351.60	2,887,872.28	2,573,788.18	2,473,404.99	2,294,773.88	2,227,480.57	2,227,480.57	2,224,280.53	2,788,878.88	(191,121.70)	
<b>Interest Calculations</b>															
Monthly interest rate	31		3.00%	3.04%	3.09%	3.42%	3.47%	3.46%	3.52%	3.59%	3.91%	3.90%	3.96%	3.72%	
Monthly interest earned	32	(Line 30) x (Line 31)	8,884.03	8,440.00	8,608.00	8,548.00	7,811.80	7,369.00	7,304.00	7,211.00	6,668.00	7,547.00	7,486.00	5,901.00	82,516.00
Service fees	33		(1,815.54)	0.00	0.00	(1,868.58)	0.00	0.00	(1,887.45)	0.00	(1,763.74)	0.00	0.00	(7,283.28)	
Net interest earned	34	Line 32 + 33	7,068.49	8,440.00	8,608.00	6,679.42	7,811.80	7,369.00	5,416.55	7,211.00	4,904.26	7,547.00	7,486.00	5,901.00	75,232.72
Cumulative net interest earned	35		7,068.49	15,488.49	24,344.46	30,977.80	38,789.60	46,158.60	52,063.46	59,274.46	65,982.46	71,745.72	79,281.72	85,132.72	
Forecast revenue balance (including interest)	36	Line 30 + 35	3,233,674.87	3,520,989.05	3,409,630.18	2,728,550.18	2,612,555.08	2,510,929.00	2,519,548.46	2,294,047.85	2,292,453.09	2,286,236.20	2,283,482.11	2,835,200.98	

AN ORDER IN THE MATTER OF the Public Utilities Act  
Revised Statutes, 1986, c. 143, as amended

and

Yukon Energy Corporation and The Yukon Electrical Company Limited  
Diesel Contingency Fund Reports

**BEFORE:** B. Morris, Chair )  
G. Leslie, Member )  
C. Metz Murray, Member )  
D. Schmekel, Member )  
W. Shanks, Member ) October 27, 1999

**ORDER 1999-3**

**WHEREAS:**

- A. The terms of the 1996/97 Negotiated Settlement approved by Board Order 1996-6 provided for the creation of a Diesel Contingency Fund ("DCF") to smooth customer rate changes and offset forecast diesel costs.
- B. The terms also provided that an annual report detailing additions and deletions to the fund is to be filed with the Board so that the Board may oversee the fund activities. The Board is to direct the Companies on the additions and deletions to the fund.
- C. On June 6, 1999 Yukon Energy Corporation filed a report, detailing the changes to the Diesel Contingency Fund in 1998, together with revised reports for 1996 and 1997. The filing also included, for convenience, copies of relevant DCF tables for The Yukon Electrical Company Limited.
- D. On June 17, 1999 the Board distributed copies of the report to interested parties for comment.
- E. On July 4, 1999 the Utilities Consumers' Group ("UCG") responded with some preliminary concerns and requested a full review of this report with a similar process to rate hearings; interrogatories and responses to/from the Companies to the various intervenor concerns. No other comments were received.

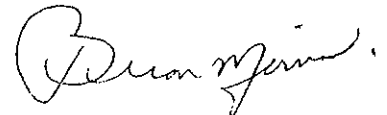
- F. The Board forwarded the UCG concerns to the Companies but noted that the Board had the ultimate jurisdiction over the DCF.
- G. On October 7, 1999 Yukon Energy Corporation provided comments on the submission from the Utilities Consumers' Group and additional information to assist the Board in its review.
- H. The Board has reviewed the material and finds that approval of the report is in the public interest.

**NOW THEREFORE** the Board orders that:

- 1. The Board approves the additions and deletions to the Diesel Contingency Fund for 1996 to 1998 as filed.

Dated at the City of Whitehorse, in the Yukon Territory, this 3<sup>rd</sup> day of November 1999.

**BY ORDER**



Brian Morris  
Chair

1 **REFERENCE: Application**

2

3 **ISSUE/SUB-ISSUE: Section 8 of rate policy directive, Order in Council (OIC)**  
4 **1995/90**

5

6 **QUOTE:**

7

8 **Fuel Price adjustment**

9

10 **8.** The Board must permit Yukon Energy Corporation and The Yukon Electrical  
11 Company Limited to adjust their rates to retail customers, major industrial customers,  
12 and isolated industrial customers so as to reflect fluctuations in the prices for which the  
13 two utilities pay for diesel fuel, without the requirement for specific application to and  
14 approval of the Board.

15

16 **PREAMBLE:**

17

18 The Board wishes to understand the Companies response to UCG-YEC/YECL-1-2:

19

20 "At each GRA the Companies provide a forecast for diesel fuel generation and a  
21 forecast fuel price. The policy established in Section 8 of OIC 1995/90 and the  
22 fuel adjustment mechanism effectively provides for stability relative to swings in  
23 fuel prices and addresses the risk inherent in forecasting diesel fuel prices. This  
24 protects all parties from the risks related to forecasting fuel prices up to a year in  
25 advance (especially in circumstances where fuel prices fluctuate widely and are  
26 difficult to forecast with any accuracy). This does not address risks related to  
27 changes in fuel volume (at GRA-approved fuel prices) from the GRA forecast."

28

29 **QUESTION:**

30

31 a) From the Companies perspective please explain fully the "policy established in  
32 Section 8 of OIC 1995/90."

33

34 b) Please explain what is meant by "the fuel adjustment mechanism." Please  
35 provide supporting documentation.

1 c) Please explain "the risk inherent in forecasting diesel fuel prices."  
2

3 d) Please explain "... provides for stability relative to swings in fuel prices ..."  
4

5 e) The Companies state that "[OIC 1995/90] does not address risks related to  
6 changes in fuel volume ... from the GRA forecast."<sup>1</sup> Responding to UCG-  
7 YEC/YECL-1-3, wherein the Companies were requested "to provide copies of  
8 any YUB Orders authorizing the use of actual diesel fuel consumption in the  
9 calculation of the fuel adjustment clause", the Companies submitted that  
10 "Pursuant to OIC 1995/90 ...The Board has in the past approved the Rider F  
11 Rate Schedule (Order 1989-1 and Order 1990-2) in essentially the same form as  
12 the Rider F Rate Schedule included in current approved rate schedules."  
13

- 14 i. In the response to IR-UCG-YEC/YECL-1-3 reference is made to Board  
15 Order 1989-1 and Order 1990-2. Please provide copies of these orders;  
16 and  
17 ii. In respect of Rider F and the determination of DFPVA balances, please  
18 provide all supporting documentation wherein the Board has approved  
19 diesel fuel price variances for diesel volumes greater than approved GRA  
20 forecast diesel fuel volumes.  
21

22 **ANSWER:**  
23

24 **(a)**  
25

26 The policy underlying Rider F was explained in detail in Appendix A of the Rider F – Fuel  
27 Adjustment Rider & Deferred Fuel Price Variance Policy.  
28

29 Section 8 of Rate Policy Directive Order in Council (OIC) 1995/90 provides for fuel price  
30 adjustments and sets out that the Board must permit Yukon Energy and Yukon Electrical  
31 (the "Companies") to adjust their rates to retail customers, major industrial customers,  
32 and isolated industrial customers to reflect fluctuations in the prices for diesel fuel,  
33 without the requirement for specific application to and approval of the Board. As  
34 reviewed in Appendix A, this basic OIC rate policy direction has been in place since OIC

---

<sup>1</sup> UCG-YEC/YECL-1-4.

1 1988/150 and the policy of the Companies to administer Rider F as described below  
2 reflects the general practice since 1988 (as regards diesel fuel prices) and since 2005  
3 (as regards secondary sales rates).

4  
5 **(b)**

6  
7 Rider F - Fuel Adjustment Rider (as displayed on customers' bills) is the rate mechanism  
8 (or fuel adjustment mechanism) used to collect/reimburse the net fuel price variance  
9 from/to customers pursuant to the policy established in section 8 of OIC 1995/90.

10  
11 Board Order 2003-3 notes that "Rider F exists as a consequence of Order-in-Council  
12 1995/90, issued in 1995 as a rate directive to the Board." In this regard (and as noted in  
13 the same Board Order): "Rider F is designed to adjust rates for actual diesel fuel price  
14 differences vs. the fuel price implicit in the rates. YEC and YECL periodically check to  
15 see if the existing rider will be sufficient to recover price shortfalls over a reasonable  
16 period given updated diesel consumption, price and sales forecast. They then decide  
17 whether it is practical to make a change and inform the Board of a fuel price adjustment  
18 designed to recover the deficiency (or surplus) over the next year".

19  
20 Please see responses to YUB-YEC/YECL-2-1, YUB-YEC/YECL-2-2 and YUB-  
21 YEC/YECL-2-3 for supporting documentation and examples.

22  
23 **(c) and (d)**

24  
25 Rider F normalizes values for volatile and uncontrollable factors inherent in forecasting  
26 fuel prices, including all factors affecting future world oil prices and the relationship  
27 between world oil prices and diesel fuel prices charged to the utilities in Yukon.

28  
29 Absent a Rider F, the utilities would have to base their forecast costs and rates for each  
30 GRA on "best guesses" or forecasts at a rate hearing as regards to fuel prices - and  
31 ratepayers and the Board would need to assess such forecasts in order that a specific  
32 price for fuel could be reflected in utility rates charged to ratepayers. Subsequent to  
33 customer rates being so determined, actual earnings of the utilities would be affected  
34 each time fuel prices changed - and, to the extent that fuel costs are material to the

1 utility's overall earnings, major changes in fuel prices would lead to pressures for new  
2 GRA hearings (either to lower rates or to raise rates in response to fuel price changes).

3  
4 A Rider F mechanism as provided for in OIC 1995/90 allows for fuel price changes to be  
5 accommodated in a way that is fair to all parties without the need for new GRA or other  
6 Board reviews.

7  
8 In all cases, with a Rider F mechanism, ratepayers and the utilities will both be assured  
9 that the rates charged to ratepayers (including Rider F) will account for actual fuel prices  
10 that are incurred rather than the GRA-period forecasts.

11  
12 One benefit to all parties of this approach is to avoid guessing what the long term-price  
13 of fuel will be or whether indeed fuel prices have hit the highest point or lowest point at  
14 the time of any specific GRA. The Companies are able to use the most readily available  
15 fuel price at the time of a GRA filing – and to ensure that if prices change overtime,  
16 neither the utility nor ratepayers are at risk for these unpredictable and uncontrollable  
17 variations.

18  
19 **(e)**

20  
21 Excerpts of each of the requested orders are provided in response to YUB-YEC/YECL-  
22 2-1(h) and (i).

23  
24 Links to the full Board Orders are available on the Board's website at the links indicated  
25 below. For Order 1989-1 the Rider F schedule approved is at page 62 of the pdf  
26 document. For Order 1990-2 the Rider F schedule approved is at page 50 of the pdf  
27 document.

28  
29 Order 1989-1

30 [http://yukonutilitiesboard.yk.ca/pdf/13\\_boardorder1989\\_1.pdf](http://yukonutilitiesboard.yk.ca/pdf/13_boardorder1989_1.pdf)

31  
32 Order 1990-2

33 [http://yukonutilitiesboard.yk.ca/pdf/20\\_boardorder1990\\_2.pdf](http://yukonutilitiesboard.yk.ca/pdf/20_boardorder1990_2.pdf)

- 1 For supporting documentation wherein the Board has approved diesel fuel price
- 2 variances for diesel volumes greater than approved GRA forecast diesel fuel volumes
- 3 please see response provided to YUB-YEC/YECL-2-1(h) and (i).



**LEADING EDGE**  
**(LE)**



1 **REFERENCE:           Submission**

2  
3 **QUESTION:**

4  
5       a) Page 1: Please explain how the Deferral Fuel Price Variance Account (DFPVA)  
6       would handle a situation where in the early part of a calendar year both the fuel  
7       price and the amount of diesel generation are in excess of the amounts approved  
8       by the Board and later in the year the hydro energy availability was above the  
9       long term average. What would be the impact on the Diesel Contingency Fund  
10      (DCF)?

11  
12 **ANSWER:**

13  
14 **(a)**

15  
16 See response to LE-YEC/YECL-1-3 for how the DFPVA deals with changes to fuel price  
17 and generation.

18  
19 The current filing is premised on specific issues relating to the administration of the  
20 deferred fuel price variance account. The Diesel Contingency Fund (DCF) is not related  
21 to deferrals to the DFPVA or to Rider F charges and is consequently not part of the  
22 current review.

23  
24 **REVISED ANSWER:**

25  
26 **(a)**

27  
28 Board Order 2011-12 Appendix A noted: “The Board wishes to understand whether  
29 there is a relationship between the Diesel Contingency Fund (DCF) and the DFPVA.  
30 Therefore, the Board directs the Companies to fully respond to this IR. In addition, the  
31 Board directs the Companies to demonstrate by way of example how the DCF operates,  
32 and through that example show that there is or is not an interrelationship between the  
33 DCF and the DFPVA.”

34  
35 As noted in the initial response, there is no interrelationship between the DCF and the  
36 DFPVA. An example is provided below to demonstrate this conclusion.

1 As background, the Diesel Contingency Fund, as established in the 1996/97 GRA, is  
2 designed to stabilize the utilities' costs of diesel that arise from fluctuations in generation  
3 related to higher or lower than average long term hydro generation due to water  
4 availability. For example, under present firm load conditions, were a severe drought to  
5 arise giving rise to the requirement for diesel generation for baseload supply, the DCF  
6 would pay the utilities for this quantity of diesel fuel (at GRA fuel prices). Conversely, at  
7 times when baseload diesel generation expense is forecast to be required in the revenue  
8 requirement as approved by the Board, were water conditions to arise that allow diesel  
9 generation less than the amount approved by the Board, the utilities would pay the DCF  
10 for this quantity of diesel fuel (at GRA fuel prices). The key factor in each instance for the  
11 DCF to be operative is a variance in generation related only to higher or lower than  
12 average long term hydro generation due to a change in hydro generation capability  
13 (typically due to water availability). The DCF is not affected by fuel price variances, as  
14 such, nor by the fact that diesel volumes change (absent such changes being due to  
15 variances in hydro generation capability).

16  
17 In order to respond fully to the example noted in LE-YEC-YECL-1-4 the following  
18 example is provided to illustrate how the DCF and Rider F DFPVA operate during a  
19 given month (further detail regarding the history and operation of the DCF is provided in  
20 YUB-YEC-YECL-2-4):

21  
22 ***Relevant assumptions related to DCF and DFPVA:***

- 23
- 24 • Diesel must be on the margin for the month in question - note that this has not  
25 been deemed to be the case since the late 1990s. Further, the DCF as currently  
26 approved applies only to WAF.
  - 27
  - 28 • Assume that long term average YEC and YECL hydro generation on WAF for  
29 this month (as approved by YUB) is 20 GWh and that forecast diesel generation  
30 as approved by YUB for the forecast load in that month is 10 GWh.
  - 31
  - 32 • Assume the GRA-approved diesel fuel is 20 c/kWh plus 5 c/kWh O&M price for  
33 YEC on WAF [25 cents per kWh total approved incremental cost].
  - 34
  - 35 • Actual diesel fuel price for the month is 30 cents per kWh.

1 Based on the above assumptions, the following demonstrate impacts on DCF and  
2 DFPVA under different actual conditions affecting hydro and diesel generation:

- 3
- 4 • If actual hydro generation is at 20 GWh for the month, there can be no impact on  
5 DCF (regardless as to actual diesel generation).  
6
  - 7 • However, if actual hydro generation is 25 GWh for the month, and diesel  
8 generation is 15 GWh, 20 GWh or any other positive number – the DCF impact is  
9 that YEC<sup>1</sup> will pay into DCF an amount equal to reduced diesel generation  
10 caused by higher hydro generation (5 GWh) times the 25 cents per kWh GRA  
11 approved incremental diesel cost, or \$1.25 million - this DCF determination is not  
12 impacted by any Rider F DFPVA.  
13
  - 14 • In contrast to the DCF, the Rider F DFPVA will pay YEC for the gap of 10 c/kWh  
15 between GRA-approved fuel price of 20 c/kWh and actual fuel price of 30 c/kWh,  
16 multiplied by the actual diesel generation, i.e., \$1.5 million at 15 GWh diesel, and  
17 \$2 million at 20 GWh diesel generation - these Rider F determinations are not  
18 impacted by any DCF determination.

19  
20 Accordingly, the example shows that there is no interrelationship between the DCF and  
21 the DFPVA.

22  
23 The Response to LE-YEC/YECL-1-4(a) requires for an assessment of how the DFPVA  
24 and DCF would be affected in the following circumstances:

- 25
- 26 **1. In the early part of a calendar year both the fuel price and the amount of**  
27 **diesel generation are in excess of the amounts approved by the Board.** The  
28 question does not specify why these facts occur - but given the balance of the  
29 question, the answer assumes that hydro generation is at long term average  
30 levels as approved by the YUB and that higher diesel generation here relates  
31 only to a variance from forecasts used for a GRA as approved by the YUB and  
32 that this variance relates to load growth or other changes from forecast (i.e.,  
33 colder weather or unscheduled maintenance) not addressed by either the DCF

---

<sup>1</sup> The example above deals with YEC driven DCF variances, assuming there was no variance related to YECL's Fish Lake generation. The DCF also contains a provision that provides stabilization for Fish Lake variances, where these variances drive purchased power volume changes related to diesel costs, but these diesel-related costs are similarly linked to the GRA approved fuel price, so also have no impact on Rider F calculations.

1 (which addresses risks related to variations in hydro) or by Rider F (which  
2 addresses variations in fuel price for GRA-approved fuel price).

3  
4 In these circumstances the following would occur:

- 5
- 6 a. For diesel related costs incurred related to diesel generation in excess of  
7 GRA-forecast volumes – the Companies would expense at the GRA  
8 approved fuel cost per litre the costs for additional diesel generation  
9 above GRA-forecast approved amounts.
  - 10 b. For diesel costs incurred related to higher fuel prices than GRA approved  
11 fuel prices – for actual diesel generation, the difference between the  
12 GRA-fuel price and the actual fuel price would be deferred to the DFPVA.
  - 13 c. As noted, no impacts on the DCF would occur.
- 14

15 **2. Later in the year the hydro energy availability was above the long term**  
16 **average.** This answer assumes that fuel prices continue at levels higher than  
17 GRA-approved fuel prices, but that hydro generation is higher than the long term  
18 average generation approved at the last GRA. In these circumstances the  
19 following would occur:

- 20
- 21 a. For diesel costs incurred related to higher fuel prices than GRA forecast  
22 fuel prices – the difference between the GRA-fuel price and the actual  
23 fuel price would continue to be deferred to the DFPVA for all actual diesel  
24 generation.
  - 25 b. For hydro generation on WAF higher than long term average generation  
26 approved by the Board in relation to the DCF the treatment would depend  
27 on whether or not diesel is “on the margin”.  
28
    - 29 i. If diesel is not on the margin then there would be no difference in  
30 treatment for costs related to additional volumes of fuel  
31 consumed. Fuel costs would continue to be expensed at the GRA  
32 approved fuel price for YEC as reflected in approved rates and  
33 excess costs (savings) compared to GRA approved price would  
34 be deferred to the DFPVA. The accounting treatment for YECL is  
35 similar in its effect, but uses a slightly different process so as to  
36 charge actual diesel cost to expense and adjust revenue and

1 balance sheet for the difference. To the extent that higher hydro  
2 generation lead to reduced diesel generation, the amounts being  
3 paid to the DFPVA would be reduced in the example.  
4 ii. If diesel is on the margin then savings related to GWh of diesel  
5 generation saved due to higher-than-average hydro generation  
6 would be refunded to the DCF at GRA-approved diesel fuel prices,  
7 i.e., the utility would continue to incur costs for diesel generation  
8 based on long term average hydro generation as approved by the  
9 Board. In the circumstances noted in the example, with higher  
10 hydro generation, there would be reduced reliance on diesel and  
11 fewer GWh of diesel generation – meaning that each GWh of  
12 diesel saved would be refunded to ratepayers through the DCF at  
13 GRA-approved fuel prices.



1 **REFERENCE:           Submission**

2  
3 **QUESTION:**

4  
5 Page 1: Please explain in detail the transactions in the DFPVA and the DCF under the  
6 following conditions:

7  
8       a) Diesel fuel price and amount of diesel generation are at the Board approved  
9       levels with hydro availability either above or below the long term average  
10       approved by the Board (what is this amount)?

11  
12       b) Diesel fuel price is at the Board approved price and diesel generation is below  
13       the Board approved amount with hydro availability either above or below the long  
14       term average approved by the Board?

15  
16       c) Diesel fuel price is at the Board approved price and diesel generation is above  
17       the Board approved amount with hydro availability either above or below the long  
18       term average approved by the Board?

19  
20       d) Diesel fuel price is above the Board approved price and diesel generation is  
21       below the Board approved amount with hydro availability either above or below  
22       the long term average approved by the Board?

23  
24       e) Diesel fuel price is above the Board approved price and diesel generation is  
25       above the Board approved amount, and hydro availability is either above or  
26       below the long term average approved by the Board?

27  
28 **ANSWER:**

29  
30 **(a) to (e)**

31  
32 This question addresses DCF issues and is beyond the scope of this proceeding. Please  
33 see response to LE-YEC/YECL-1-4.

1 **REVISED ANSWER:**

2  
3 **(a)**

4  
5 The Board in Order in Order 2011-12 Appendix A noted: “As the Board wishes to  
6 understand whether there is a relationship between the DCF and the DFPVA, the Board  
7 directs the Companies to fully respond to the IR.”

8  
9 The Companies have addressed with an example in LE-YEC/YECL-1-4 REVISED the  
10 explanation as to why no relationship exists between the DCF and the DFPVA. In  
11 responding fully to LE-YEC/YECL-1-5, it is noted that this IR asks for each subsection  
12 that the Companies “explain in detail the transactions in the DFPVA and the DCF under  
13 the following conditions”.

14  
15 **(b)**

16  
17 See explanation regarding interrelation of DCF and DPFVA provided in LE-YEC/YECL-  
18 1-4 REVISED and YUB-YEC/YECL-2-4. There is no interrelationship between the DCF  
19 and DFPVA.

20  
21 As noted in YUB-YEC/YECL-2-4 the DCF rules and methods need to be reviewed and  
22 updated due to material changes to the Yukon system since the DCF was last active  
23 (i.e., diesel has not been on the margin since the late 1990’s and the DCF has not been  
24 active since that time). In this respect, the long term average for hydro generation is  
25 required to be updated to consider current system conditions (added generation) and the  
26 application of the DCF needs to be expanded to consider the integrated grid system (the  
27 DCF currently only applies to the former WAF grid).

28  
29 In the example noted if the diesel fuel price is at the GRA-approved amount there would  
30 be no variance in fuel price and no impact on the DFPVA (no amounts deferred).

31  
32 With regard to DCF impacts, if diesel is on the margin and the variance relates to WAF:

- 33  
34 • If actual hydro generation is above the long term average hydro approved by the  
35 Board then the cost of diesel saved due to higher than average hydro generation

1 would be deferred to the DCF (at GRA approved incremental diesel generation  
2 cost per kWh).

3

- 4 • If the actual hydro generation is lower than the long term average then the added  
5 diesel generation (for every GWh lower than forecast long term average hydro  
6 generation) would be refunded from the DCF (at GRA approved incremental  
7 diesel generation cost per kWh).

8 **(b)**

9

10 See also response to LE-YEC/YECL-1-4 and response to (a) above. With no variance in  
11 diesel fuel price there would be no impact on the DFPVA.

12

13 The DCF impacts would be the same as (a) above if diesel is on the margin. The DCF  
14 would only be impacted by a change in diesel generation equal to WAF hydro generation  
15 variance from approved long term average, and valuation of this change would be based  
16 only on GRA approved incremental diesel generation cost per kWh).

17

18 **(c)**

19

20 Diesel fuel price is assumed at the Board approved price and diesel generation is  
21 assumed above the Board approved amount with hydro availability either above or  
22 below the long term average approved by the Board:

23

- 24 • See LE - YEC/YECL-1-4 REVISED example and examples above – no impact on  
25 DFPVA (as no variance in diesel fuel price).

26

- 27 • DCF impacts same as for (a) response (i.e., only impacted by change in diesel  
28 generation equal to hydro generation variance from approved long term average,  
29 and valuation of this change based only on GRA approved incremental diesel  
30 generation cost per kWh)

31

32 **(d)**

33

34 See LE -YEC/YECL-1-4 REVISED example and examples above.

1 If actual diesel fuel price is higher than the GRA-approved price the impact on the  
2 DFPVA would be equal to fuel price variance multiplied by the number of litres achieved  
3 by dividing actual diesel generation by GRA forecast plant efficiency rates (the reduction  
4 in diesel generation as assumed would act to reduce the impact on the DFPVA).

5  
6 The DCF impacts remain the same as for (a) response (i.e., only impacted by change in  
7 diesel generation equal to hydro generation variance from approved long term average,  
8 and valuation of this change based only on GRA approved incremental diesel generation  
9 cost per kWh).

10  
11 **(e)**

12  
13 See example provided in LE-YEC/YECL-1-4 REVISED.

14  
15 If actual diesel fuel price is higher than the GRA-approved price the impact on the  
16 DFPVA would be equal to fuel price variance multiplied by the number of litres achieved  
17 by dividing actual diesel generation by GRA forecast plant efficiency rates (the increase  
18 in diesel generation as assumed would act to increase the impact on the DFPVA).

19  
20 DCF impacts remain the same as for (a) response (i.e., only impacted by change in  
21 diesel generation equal to hydro generation variance from approved long term average,  
22 and valuation of this change based only on GRA approved incremental diesel generation  
23 cost per kWh).

1 **REFERENCE:       Submission**

2  
3 **QUESTION:**

- 4  
5       a) Page 1 (last paragraph): Would YEC please explain why in the 2008-2009 GRA  
6       Phase II proceeding YEC was critical of YECL and their Rider D application  
7       essentially accusing YECL of transferring the sales forecast risk onto ratepayers  
8       (revised Transcripts pages 587 to 592; Yukon Energy Final Argument pages 42  
9       to 47; and Yukon Energy Reply Argument pages 16 to 18)?

10  
11 **ANSWER:**

12  
13 **(a)**

14  
15 Questions regarding Rider D are beyond the scope of this proceeding. Please see  
16 response to LE-YEC/YECL-1-3. The DFPVA does not address variances in generation  
17 from GRA-forecast and only addresses variances in diesel fuel price. As noted on page  
18 1 of the Application, this does not address risks related to changes in fuel volume (at  
19 GRA-approved fuel prices) from the GRA forecast.

20  
21 **REVISED ANSWER:**

22  
23 **(a)**

24  
25 The Board in Order 2011-12 Appendix A did not direct a further response to the  
26 interrogatory, but directed the Companies “to demonstrate by way of example how the  
27 DCF, Rider D and the DFPVA operate, and through that example show that there is or is  
28 not an interrelationship between the DCF, Rider D and the DFPVA.”

29  
30 Please see responses to LE-YEC/YECL-1-4 REVISED and LE-YEC/YECL-1-5  
31 REVISED where the Companies have demonstrated by way of examples how the DCF  
32 and the DFPVA operate and that there is no interrelationship between the DCF and the  
33 DFPVA.

1 With regard to Rider D, Order 2010-13 did not approve YECL's application for a Rider D  
2 and no such rider exists at this time<sup>1</sup>; it was also noted in that order that diesel is not  
3 forecasted to be on the margin during the 2009 period (paragraphs 182 to 184 of Order  
4 2010-13). Accordingly, the Companies cannot at this time provide an example based on  
5 any actual Rider D as approved by the Board. Currently, amounts charged by YEC to  
6 YECL under the ERA would be deferred to YECL's approved wholesale purchase power  
7 deferral account, and collection of such amounts from ratepayers requires separate  
8 approval of the Board.

9  
10 To assist the Board on this matter, it is noted that Order 2010-13 (paragraph 167-168)  
11 observed that Rider D as proposed by YECL would only address dispensation of  
12 balances in YECL's Board approved wholesale purchase power deferral account as  
13 approved in Order 2009-2 which relates to variances between forecast and actual costs  
14 of purchase power by YECL for the hydro zone during the period when diesel generation  
15 was on the margin and when the approved run out rate set under the ERA in Rate  
16 Schedule 42 was different than rates used to determine the forecast cost of purchase  
17 power for diesel generation.

- 18  
19 • Rider D as proposed by YECL and as so described in Order 2010-13 would have  
20 no relationship to YEC's average or actual hydro generation, and thus has no  
21 relationship to the DCF.
- 22  
23 • Rider D as proposed by YECL and as so described in Order 2010-13 would  
24 depend on YECL variances in purchase power volumes and the variance  
25 between the stated run out rate charged to residential NG customers in the hydro  
26 zone (as per approved Rate Schedule 42) and the approved YEC incremental  
27 diesel generation cost, i.e., none of these factors have any bearing on the  
28 DFPVA applicable to either YEC or YECL, or to any variance between actual and  
29 GRA approved fuel prices.

---

<sup>1</sup> The Board noted that in Board Order 2009-2, it approved YECL's wholesale purchase power deferral account and implicit in the Board's approval of the purchase power deferral account is the approval of a future rider to dispense of the accumulated balances in the deferral account. The Board noted that the deferral account exists and noted that Rider D may be applied for in the next YECL GRA when the issues of the deferral account and the mechanics of money flowing into and out of the account can be addressed. Conversely, the Board noted that if YECL determines that the balance in the deferral account is too large, YECL may file a separate Rider D Application at that time, providing all assumptions and calculations (including in electronic form), and over what term YECL proposes to dispense with the balance in the deferral account.

1 **REFERENCE:           Submission**

2  
3 **QUESTION:**

- 4  
5       a) Page 1 (last paragraph): YEC at page 17 of their Final Argument of the Phase II  
6       proceeding states as follows: “YEC has not sought, and does not today have,  
7       any deferral account or special rate rider charged to all retail ratepayers in Yukon  
8       in order to protect YEC against added diesel generation costs arising from added  
9       industrial or YEC retail loads that exceed approved GRA forecasts.” Would YEC  
10      please explain why it is now in fact seeking to recover a portion of their diesel  
11      generation costs from added industrial and/or retail loads in excess of the  
12      approved GRA forecast from all retail ratepayers?

13  
14 **ANSWER:**

15  
16 **(a)**

17  
18 See response to LE-YEC/YECL-1-6.

19  
20 **REVISED RESPONSE:**

21  
22 For clarity, the Companies are not seeking recover “a portion of their diesel generation  
23 costs” from “all retail ratepayers”. The Companies only recover (or refund) diesel  
24 generation costs arising from ***fluctuations in the prices*** that are paid for diesel fuel.  
25 This is for 3 reasons:

- 26  
27       1) **The collection (or refund) of amounts related to fluctuations in fuel price**  
28       **via Rider F is required by Yukon Government Rate Policy:** Section 8 of OIC  
29       1995/90 provides the following direction relating to fuel price risk in Yukon and  
30       states:

31  
32               The Board must permit Yukon Energy Corporation and The Yukon  
33               Electrical Company Limited to adjust their rates to retail customers, major  
34               industrial customers, and isolated industrial customers so as to reflect  
35               fluctuations in the prices for which the two utilities pay for diesel fuel,

1 without the requirement for specific application to and approval from the  
2 Board.

3

4 Accordingly, the Companies must be permitted to adjust their rates “so as to  
5 reflect fluctuations in the prices for which the two utilities pay for fuel”, i.e., the  
6 adjustment mechanism must apply to all fuel consumed, not just GRA forecast  
7 fuel.

8

9 **2) The collection (or refund) of amounts related to fluctuations in fuel price**  
10 **via Rider F has been consistently applied for over 2 decades:** During the  
11 period since 1988 the Companies understand that Rider F has been  
12 administered consistently on this same basis.

13

14 **3) The collection (or refund) of amounts related to fluctuations in fuel price**  
15 **via Rider F is consistent with regulatory practice in every other jurisdiction**  
16 **reviewed that maintains similar fuel price variance accounts:** This includes  
17 similar jurisdictions to Yukon who face substantial fuel oil requirements for  
18 generating energy, specifically NWT, Nunavut, and Newfoundland. The  
19 Companies are not aware of any jurisdiction that provides a fuel price adjustment  
20 mechanism that only partially addresses fuel price variances in that the  
21 mechanism is in some way truncated or limited to some utility board approved  
22 fuel volume.

23

24 See also response to LE-YEC/YECL-1-4 REVISED which details how the DFPVA is  
25 designed to operate. To use a specific example:

26

27 • Assume the utility had a Revenue Requirement approved at a past GRA which  
28 included, for example, 10000 litres of diesel fuel at \$1.00 per litre.

29

30 • As a result of load growth, the required quantity of diesel fuel (at consistent diesel  
31 units efficiency rates) grows to 20,000 litres, the utility would book the costs of  
32 \$20,000 in their normal annual operating accounts. This is a load-related  
33 variance not covered by Rider F – in this example there is no price-related  
34 variance of the type covered by Rider F.

- 1           ○ Similar situations can arise where the extra litres arise due to low water -  
2           in that case the extra \$10,000 of costs for the extra diesel are charged to  
3           the DCF.
- 4           ○ If the extra diesel was due to an uninsured loss that meets the  
5           appropriate accounting policies (e.g., size of claim), the extra \$10,000 is  
6           charged to the Reserve for Injuries and Damages.
- 7           ○ If the extra diesel was required due to a capital project (e.g., capital work  
8           to a hydro generator) then the extra \$10,000 is charged to the capital  
9           project.
- 10
- 11         • If, simultaneous with the situation noted above there is a fluctuation in the price  
12         paid for diesel fuel, for example from \$1/litre to \$1.10/litre, then the total amounts  
13         paid by the utility for the 20,000 litres will be \$22,000. This extra \$2,000 only  
14         arises due to fluctuations in the price paid for diesel fuel and as such is fully  
15         consistent with the Rate Policy definitions for Rider F. The \$2,000 will be charged  
16         to the Rider F, and the remaining \$20,000 will be addressed exactly as noted  
17         above – with the “un-fluctuated” price of diesel being charged to the appropriate  
18         accounts.



**UTILITIES CONSUMERS' GROUP  
(UCG)**



1 **REFERENCE: Application, page 1**

2  
3 The utilities indicate that “for each actual litre of diesel consumed to generate electricity,  
4 the difference between the actual weighted average cost per litre of fuel consumed and  
5 the most recent GRA-approved fuel price is recorded in the DFPVA. The variance  
6 applies to actual diesel fuel consumed (all fuel consumed) when calculating additions or  
7 deletions to the account, i.e. the Companies remain at risk (at GRA-approved fuel  
8 prices) for changes in volume from the GRA Forecast”.

9  
10 **QUESTION:**

- 11  
12 a) Please confirm that the YUB has approved an amount for fuel expense in the  
13 revenue requirements of each of the utilities. Please provide details of the  
14 approved annual expense showing consumption and price.  
15  
16 b) Please provide a table for 2009, 2010 and 2011 to date comparing approved  
17 levels of fuel consumption by month at GRA-approved prices and actual fuel  
18 prices, and actual fuel consumption at GRA-approved prices and actual prices.  
19  
20 c) Please explain why the utilities are proposing the use of actual diesel fuel  
21 consumed in the fuel adjustment clause calculations rather than the fuel  
22 consumption levels approved by the YUB for recovery in rates.  
23  
24 d) Please provide copies of any YUB Orders authorizing the use of actual diesel  
25 fuel consumption in the calculation of the fuel adjustment clause.  
26  
27

28 **ANSWER:**

29  
30 **(a), (b), and (c)**

31  
32 The current process is premised on specific issues relating to the administration of the  
33 deferred fuel price variance account, and the requested information is outside the scope  
34 of this current review process. See also responses to LE-YEC/YECL-1-1, LE-  
35 YEC/YECL-1-2 and LE-YEC/YECL-1-14.

1 **REVISED ANSWER re: (a), (b) and (c):**

2

3 **(a)**

4

5 In response to the first part of this question, it is confirmed that the YUB approved a  
6 revenue requirement for each of the utilities for each of 2008 and 2009 that included a  
7 forecast for diesel fuel expense that would be required in each test year.

8

9 The utilities do not agree that the YUB “has approved an amount for fuel expense” if this  
10 phrase is being used to suggest that the utilities are only allowed to record (or  
11 conversely absolutely must record) this quantity of fuel at the approved fuel price. The  
12 basis of forward test year regulation is the development of reasonable forecasts of the  
13 expected overall cost to operate the utility for the test year in question; YUB approval of  
14 these forecasts does not define the exact expense amount that the utility will record in  
15 any year.

16

17 **(b)**

18

19 Please see response to YUB-YEC/YECL-2-1(f).

20

21 **(c)**

22

23 Please see response to LE-YEC/YECL-1-7 REVISED.

24

25 **(d)**

26

27 Pursuant to OIC 1995/90 (and earlier OICs 1991/62 and 1988/150) the Board must  
28 permit the Companies to adjust rates to reflect fluctuations in the prices for which the two  
29 utilities pay for diesel fuel, without requirement for specific application to and approval of  
30 the Board. The Board has in the past approved the Rider F Rate Schedule (Order 1989-  
31 1 and Order 1990-2) in essentially the same form as the Rider F Rate Schedule included  
32 in current approved rate schedules. This provides for a change in rider in accordance  
33 with changes in Companies’ fuel costs calculated on a unit base by reference to kWh  
34 sales. The manner in which this has been calculated has not materially changed since  
35 the early 1990’s and is accepted as standard practice.

1 **REFERENCE: Application, page A-3**

2  
3 The utilities indicate that “Since the 2008/2009 General Rate Application, a Fixed Rider  
4 F has been applicable to Rate Schedule 39 – Industrial Primary Rate customers. This  
5 adjustment is required due to OIC 2007/94 which requires “Rider F applied to energy  
6 charges only, set to \$0.0 for fuel price forecast filed November 20, 2006”.

7  
8 **QUESTION:**

- 9  
10 a) Please provide details of the Rider F calculations related to industrial customers  
11 for 2005, 2006, 2007, 2008, 2009 and 2010 showing all calculations including  
12 kWh, rider rate charged and accumulated monthly amounts collected.

13  
14 **ANSWER:**

15  
16 **(a)**

17  
18 The current process is premised on specific issues relating to the administration of the  
19 deferred fuel price variance account. As noted in Yukon Energy’s 2008/2009 GRA  
20 Compliance Filing, the “Fixed Rider F” (which was introduced at that time) is a revenue-  
21 related item to YEC (relates to how amounts charged to the industrial class are booked  
22 by YEC as an offset to revenue requirement, rather than credited to the Rider F deferral  
23 account) and therefore not a Rider F or rate design-related matter. Thus, the requested  
24 information is outside the scope of the current proceeding. The “Fixed Rider F” simply  
25 enables Rider F as charged to all other customers to also be applied directly to Major  
26 Industrial customers while still complying with OIC 2007/94.

27  
28 **REVISED ANSWER:**

29  
30 **(a)**

31  
32 The Board in Order 2011-12 Appendix A directed the Companies to respond to the  
33 question but limited the timeline to the years 2007 to 2010 inclusive.

34  
35 Until November 2008 there were no industrial customers connected to the grid or being  
36 serviced under Rate Schedule 39. Accordingly, no Rider F calculations applied to  
37 industrial customers during 2007 or during 2008 prior to November.

1 Rate Schedule 39 Industrial Primary as directed in OIC 2007/94 requires that Rider F  
2 apply to industrial customers such that the rider is “set to \$0.0 for fuel price forecast filed  
3 November 20, 2006.” Rider F today is applied to industrial customers on the same basis  
4 as every other customer. This is possible because industrial base rates (Rate Schedule  
5 Industrial Primary) as of 2008, as approved in Order 2009-08 and Order 2009-10,  
6 provide for a Fixed Rider F of 0.211 cents/kWh which (pursuant to the noted Board  
7 Orders) is treated as YEC income rather than as a payment to DFPVA in order to ensure  
8 the same fuel price benchmark is applied through Rider F to industrial customers as all  
9 other customers. Table 1 below shows the resulting variable Rider F charges or rebates  
10 affecting the DFPVA due to industrial customers by month in 2008 to 2010.

11  
12  
13  
14  
15

See also response to YUB-YEC/YECL-2-2(g).

**Table 1 – Industrial Rider F Charges: 2008 to 2010**

		Industrial Sales	Rider F	
		KWh	Rate	\$
2008	NOV	784,980	0.0046	3,610.91
	DEC	2,415,504	0.0046	11,111.32
2008	Subtotal	3,200,484		14,722
2009	JAN	2,459,856	0.0046	11,315.34
	FEB	2,277,660	0.0046	10,477.24
	MAR	2,435,832	0	-
	APR	2,399,796	0	-
	MAY	2,455,572	0	-
	JUN	2,315,208	0	-
	JUL	2,343,600	0	-
	AUG	2,259,600	0	-
	SEP	2,419,200	0	-
	OCT	2,486,400	0	-
	NOV	2,469,600	0	-
	DEC	3,032,400	-0.00354	(10,734.70)
2009	Subtotal	29,354,724		11,058
2010	JAN	2,158,800	-0.00354	(7,642.15)
	FEB	2,184,000	-0.00354	(7,731.36)
	MAR	2,637,600	-0.00354	(9,337.10)
	APR	2,091,600	-0.00354	(7,404.26)
	MAY	2,318,400	-0.00354	(8,207.14)
	JUN	1,755,600	-0.00354	(6,214.82)
	JUL	2,259,600	-0.0009	(2,033.64)
	AUG	2,562,000	-0.0009	(2,305.80)
	SEP	2,570,400	-0.0009	(2,313.36)
	OCT	2,276,400	-0.0009	(2,048.76)
	NOV	3,612,200	-0.0009	(3,250.98)
	DEC	3,828,600	-0.0009	(3,445.74)
2010	Subtotal	30,255,200		-61,935

16