



**YUKON ELECTRICAL**  
An **ATCO** Company

**YUKON  
ENERGY**



January 20, 2012

Mr. Bruce McLennan, Chair  
Yukon Utilities Board  
Box 31728  
Whitehorse, YT Y1A 6L3

Dear Mr. McLennan:

**Re: YEC & YECL Rider F – Fuel Adjustment Rider & Deferred Fuel Price Variance Policy**

On June 30, 2011, Yukon Energy Corporation (“YEC”) and Yukon Electrical Company Limited (“YECL”) (jointly “the Companies”) filed the YEC & YECL Rider F – Fuel Adjustment Rider & Deferred Fuel Price Variance Policy (“the Policy”) with the Yukon Utilities Board (“the Board”).

By Order 2011-10, the Board established a process for review of that Application, including interrogatories, argument and reply. On December 22, 2011, the Board issued Order 2011-15 approving the policy as revised by the direction set out in the Reasons for Decision (Appendix A attached to Order 2011-15). The Board directed the Companies to “provide a revised Rider F Policy, as an acknowledgement filing, within 30 days of the issuance of [Order 2011-15], incorporating the changes directed.”

The Board in Order 2011-15 directed the following changes to the Policy:

- The Board did not approve section 2.1.7 of the Policy.

Section 2.1.7 as provided in the June 30, 2011 version of the Policy has been deleted in the attached January 20, 2012 revised Policy.

The Board also provided the following directions related to DFPVA balances and related Rider F acknowledgement filings:

- When the balance in the DFPVA approaches or reaches the \$200,000 threshold, the Companies must inform the Board and interested parties of the Companies’ intentions to implement a Rider F rate change to address the outstanding balance. Also, the Companies must include this information in quarterly filings.

- When providing the Board with acknowledgement filings, notify interested parties to the Companies' 2009 Phase II tariff application.
- When submitting acknowledgement filings and related quarterly filings, submit accompanying EXCEL spreadsheets that will assist the Board and intervenors in understanding the supporting calculations. EXCEL spreadsheets will contain formulas and linkages to assist the reader, similar to what was submitted in response to YUB-YECL/YECL-2-2 and YUB-YEC/YECL-2-3.

The above directions have been incorporated into the attached revised Policy as Section 2.1.6, Section 2.2.4 and Section 2.2.5 respectively.

The Board also accepted YECL's submission as regards its standby units and accepted YECL's proposal to include the standby units in the DFPVA prospectively beginning October 2011.

The revised Policy is provided as an Attachment 1 to this correspondence and incorporates the above directed and noted changes for the Board's approval as required by Order 2010-15. Attachment 2 provides a track change version of the same document.

If you have any questions or concerns, please contact either of the two undersigned.

Yours truly,

YUKON ELECTRICAL COMPANY LIMITED

**Original signed by**

Rob Pitzel  
Financial Services Supervisor

YUKON ENERGY CORPORATION

**Original signed by**

Ed Mollard  
Chief Financial Officer

YUKON  
ENERGY



**YUKON ENERGY CORPORATION**

**&**



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

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

**January 20, 2012**



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

### **PURPOSE**

To describe the process for deferring, monitoring, collecting and remitting fuel price variance amounts for diesel fuel consumed to generate electricity.

### **BACKGROUND**

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

A Deferral Fuel Price Variance Account (DFPVA) was established by each Company to implement the fuel price variance process. It comprises two sets of transactions:

- 1) **Transactions between the Companies and their respective DFPVA:** Deferral by each utility of variances (plus or minus) in fuel price per litre from GRA forecast fuel prices. Further explanation provided in Section 1.1 and 1.2 of the Management Policy.
- 2) **Transactions between Ratepayers and the combined Companies’ DFPVA:** Where the combined balances in the Companies’ DFPVAs trend outside defined boundaries, provision for a rate adjustment rider (Rider F) to collect or refund the balances to customers in a stable fashion. Further explanation of transactions is provided in Section 1.3 and 2.0 of the Management Policy.

On this basis ratepayers pay overall rates<sup>1</sup> that reflect the actual fuel costs per litre incurred by the Companies, regardless of GRA forecast prices.

There are three activities relevant to the administration of the DFPVA.

- ***Diesel Fuel Price Variance*** – For each actual litre of diesel consumed to generate electricity, the difference between the actual weighted average cost per litre of fuel consumed and the most recent GRA-approved fuel price is recorded in the DFPVA. The variance applies to actual diesel fuel consumed (all fuel consumed) when calculating additions or deletions to the account, i.e. the Companies remain at risk (at GRA-approved fuel prices) for changes in volume from the GRA forecast. Further explanation provided in Section 1.1.

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<sup>1</sup> Base rates as approved at the last GRA plus Rider F as adjusted from time to time.



- **Rate Schedule 32 – Secondary Energy Rate Adjustment<sup>2</sup>** – For each kW.h sold to secondary sales customers, the difference between the GRA-approved rate and quarterly adjusted rate is charged/credited to the DFPVA. At this time, only Yukon Energy Corporation has secondary sales that are subject to this adjustment; YECL is not affected. This was a more recent addition to the DFPVA (since 2005) and is based on approval of the Yukon Utilities Board<sup>3</sup> rather than an OIC direction. As with the diesel fuel price variance transaction, the secondary energy rate adjustment transaction ensures the utility is not at risk for retail fuel price changes (which form the basis for secondary energy quarterly rate changes). Further explanation provided in Section 1.2 of the Management Policy.
- **Rider F - Fuel Adjustment Rider** (as displayed on customers' bills) – Is the rate mechanism used to collect/reimburse the net fuel price variance from/to customers. Further explanation provided in Section 1.3 and Section 2.0 of the Management Policy.

Each Company maintains a DFPVA for tracking transactions relative to its operations. The accounting for deferred fuel price variance has no effect on the net earnings of the utility. The detailed accounting is described below.

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<sup>2</sup> Secondary Sales is surplus or 'secondary energy' that may be made available at lower rates to qualifying General Service or Industrial customers, based on the availability of surplus hydro energy. Since 2005, the Rider F Deferred Fuel Price mechanism is used to normalize the secondary sales revenues to the benefit of both ratepayers and Yukon Energy Corporation. This acts as a natural hedge to the Rider F account, reducing the variability that would otherwise be charged through this joint Yukon Energy/YECL rate rider.

<sup>3</sup> In Order 2005-12 following Required Revenues and Related Matters proceeding.



## **MANAGEMENT POLICY**

### **1.0 ACTIVITIES RELEVANT TO ADMINISTRATION OF DFPVA**

#### **1.1 Diesel Fuel Price Variance Calculation**

- 1.1.1 Actual diesel fuel purchases are recorded, as incurred, into inventory for each Company. The purchase price is blended with existing inventory value to arrive at the weighted average cost per litre.
- 1.1.2 Each Company maintains a Fuel Expense Account.
- 1.1.3 Each month, actual fuel consumption is recorded as an expense at the weighted average cost in the Fuel Expense Account.
- 1.1.4 At the end of each month, the difference between the actual fuel cost, and the YUB approved cost/litre is adjusted to each Company's Diesel Fuel Price Variance Account and offset to sales margin (sales less cost of goods sold). The end result being each Company maintains visibility regarding the actual fuel cost, with the fuel variance being adjusted on the financial statements of each company resulting in sales margin at the GRA approved costs/litre for actual fuel consumed.

#### **1.2 Rate Schedule 32 – Secondary Energy Rate Adjustment**

Secondary Energy Rate Adjustment from the Rate Schedule 32 rate approved for the YEC-approved revenue requirement for actual YEC wholesale or retail secondary sales.

- 1.2.1 Each quarter<sup>4</sup> the secondary sales rate is adjusted via an automatic adjustment mechanism<sup>5</sup>.
- 1.2.2 The secondary sales revenues are recorded in revenue accounts at the GRA approved 'base rate', regardless of the changes in the actual quarterly secondary sales rate charged.
- 1.2.3 The Rate Schedule 32 – Secondary Energy Adjustment (i.e., the difference between the 'base rate' and the adjusted quarterly rate) is transferred to, or withdrawn from, the Diesel Fuel Price Variance account. In this manner the secondary sales adjustment serves as an offset to the diesel fuel price

<sup>4</sup> The Secondary Energy Charge for any three month Rate Period, starting January 1, 2005 and adjusted thereafter on the first day of every third subsequent month (i.e., on April 1, July 1 and October 1 in 2005 and similarly in each following year).

<sup>5</sup> As approved in Order 2005-12, the price will be adjusted based on the lowest of the three most recent Yukon Bureau of Statistics bi-weekly furnace oil prices for Whitehorse as of the 20th day of November, February, May and August for the respective upcoming quarter. This fuel oil price per litre will be converted to an equivalent cost of electricity using the parameters noted above, and the base rate for retail secondary sales will be set at the 66.7% ratio.



component (i.e., higher oil prices lead to credits to the account for secondary sales).

### 1.3 Rider F - Fuel Price Adjustment Rider

The Companies recover/refund the variances accumulated in the Diesel Fuel Price Variance Account through the '*Rider F*' – *Fuel Adjustment Rider* surcharge.

- 1.3.1 A Rider F rate to recover (or refund) the overall outstanding and forecast consolidated YEC/YECL Rider F variance is calculated by the Companies from time to time<sup>6</sup> on a Yukon-wide basis.
- 1.3.2 The Rider F rate (or refund) is applicable to each kW.h sold for firm retail sales.
  - 1.3.2.1 The same rate applies per kW.h for all sales regardless of rate block to all retail customers of both utilities [i.e., residential and general service customers for government and non-government customer classes, as well as street and space lights and industrial].
  - 1.3.2.2 The value of the rate/(refund) is determined via the Rate Change Calculation Process (see below for explanation of this process).
  - 1.3.2.3 No Rider F charge applies to secondary sales (Rate Schedule 32 and 35) or wholesale sales (Rate Schedule 42).
- 1.3.3 A fixed Rider F is applicable to Rate Schedule 39 - Industrial Primary Rate<sup>7</sup> customers.
- 1.3.4 Inter-company transfers shift a portion of the monthly Rider F collections between the Companies.
  - 1.3.4.1 Inter-company transfers ensure that neither Company is carrying a disproportionate share of the cumulative balance of the DFPVA.
  - 1.3.4.2 These transfers between Companies are necessary as there is always a mis-match between which company consumes the generation fuel versus the company with the higher collections of Rider F revenues from customers. Typically, when there is a reliance on diesel generation to serve customers, YECL has the larger customer base which provides it with the larger portion of Rider F collections while YEC incurs the larger diesel fuel price variance when there is a reliance on diesel generation to serve customers.

<sup>6</sup> As balances warrant; see section 4.0 for specifics of this review process.

<sup>7</sup> Further detail provided in Appendix A- Regulatory Context.



## 2.0 TRANSACTIONS BETWEEN RATEPAYERS & THE COMBINED COMPANIES' DFPVA

### 2.1 Rider F – Timing & Quantum of Rider F Collections

The objective of the Companies is to administer a Rider F rate which will be in effect for a year or longer while also keeping the combined Companies' Diesel Fuel Price Adjustment Account (DFPVAs) within a defined range of +/- \$200,000. This requires the Companies to calculate a Rider F rate that will result in forecast collections equal to the current balance of the Diesel Fuel Price Accounts for both Companies, plus the net of the forecast diesel fuel price variances and RS 32 Secondary Sales Adjustments expected to be encountered during the forecast period to bring the DFPVA back to zero - typically within one year.

The Companies work together to produce a consolidated Rider F rate calculation. Each company completes an analysis comprised of the following:

- 2.1.1 Actual Diesel Fuel Price Variance account balance for month end prior to proposed Effective Date for new Rider F rate.
- 2.1.2 Estimated net value of monthly diesel fuel price variance and Rider F collections at current Rider F rate for the period preceding the proposed Effective Date for the new Rider F rate.
- 2.1.3 Monthly Shortfall of forecast diesel price less GRA price times forecast volume of diesel generation to determine an estimated monthly diesel fuel price variance.
- 2.1.4 Forecast RS 32 - Secondary Sales Retail Rate less the GRA approved Secondary Sales Rate times the forecast secondary sales to determine the RS 32 Secondary Energy Adjustment (YEC only).
- 2.1.5 The combined Diesel Fuel Price Variance from both Companies as determined from the components above is then divided by the total forecast sales for the forecast period to result in the new Rider F rate.

The Companies will use best judgment to determine the timing of any collection/refund rider.

- 2.1.6 When the balance in the DFPVA approaches or reaches the \$200,000 threshold, the Companies will inform the Board and interested parties of the Companies' intentions to implement a Rider F rate change to address the outstanding balance.
- 2.1.7 If the pooled balance of the Companies' Diesel Fuel Price Accounts is fluctuating over a broad range, the Companies refine the forecast variables to reflect changing economic conditions to arrive at a new Rider F rate. Note - economic



events<sup>8</sup> can result in the Rider F rate falling short or exceeding the forecast estimates to be trued up in later adjustments.

- 2.1.8 Once the combined DFPVAs approach zero the rider will be adjusted using current fuel prices and economic conditions.

## 2.2 Reporting to YUB And Interested Parties

When a new Rider F rate is required a rate change advisory letter is cosigned by the Companies and sent to the YUB as information with the detailed calculation attached (example provided as Exhibit 1).

- 2.2.1 The Companies typically provide the YUB with approximately 30 days notice before the Effective Date for implementation of the new rate. The short notification period improves the accuracy of the rate estimate relative to the forecast.
- 2.2.2 Consistent with the YUB directive in its Reasons for Decision for YUB 2010-13, Rider F account balances will be presented in a table (a sample is attached as Exhibit 2) which will be updated quarterly, filed with the YUB and posted concurrently on each Company's website for easy public access.
- 2.2.3 The table as presented in Exhibit 2 reflects the reporting format for the full year of 2010 and is followed by the table as will be presented to report for the first quarter of 2011.
- 2.2.4 When providing the Board with the change advisory letter, the Companies will also notify interested parties as defined by the Companies' 2009 Phase II Rate Application process, or most recent application process.
- 2.2.5 When submitting the change advisory letter and quarterly filings, the Companies will provide accompanying EXCEL spreadsheets with supporting calculations, formulas and linkages to assist the reader (in a format similar to that provided in YUB-YECL/YECL-2-2 and YUB-YEC/YECL-2-3 filed during the YEC & YECL Rider F – Fuel Adjustment Rider & Deferred Fuel Price Variance Policy proceeding.

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<sup>8</sup> For example, diesel price volatility over the forecast period; actual diesel generation being greater or less than forecast generation; customer sales being greater or less than forecast; secondary sales rates or sales to customers being greater or less than forecast.

### EXHIBIT 1 - SAMPLE RATE CHANGE ADVISORY TO YUB

**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**

|  | <b>Fuel Price<br/>in Rates</b> | <b>Forecast<br/>Fuel Price</b> | <b>Forecast<br/>Litres</b> | <b>Monthly<br/>Shortfall</b> |         |
|--|--------------------------------|--------------------------------|----------------------------|------------------------------|---------|
| Due From (To) Customers - as at April 30, 2011 |                                |                                |                            |                              | 139,133 |
| 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                      | 795,332 |

**YECL Shortfall (Over-collection)**

**934,465**

**Yukon Energy Corporation**

|  | <b>Fuel Price<br/>in Rates</b>   | <b>Forecast<br/>Fuel Price</b> | <b>Forecast<br/>Litres</b> | <b>Monthly<br/>Shortfall</b> | <b>Secondary<br/>Sales Adjmt</b> |         |
|--|----------------------------------|--------------------------------|----------------------------|------------------------------|----------------------------------|---------|
| 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                      | -                                | 347,251 |

**YEC Shortfall (Over-collection)**

**491,635**

**Combined YEC/YECL Shortfall (Over-collection)**

**1,426,100**

Forecast Retail Sales (kW.h's) - May 2011- May 2012

|              |             |
|--------------|-------------|
| YECL         | 322,818,549 |
| YEC - Retail | 82,208,215  |
| Total        | 405,026,763 |

**Rider F Rate** - price per kW.h (cents) to recover forecast shortfall by May 31,2012

**0.352100106**

**EXHIBIT 2**  
**RIDER F – FUEL ADJUSTMENT RIDER**  
**QUARTERLY AND ANNUAL REPORTING FORMATS**

**Reporting format for Full Year 2010**

| <b>Rider F - Fuel Adjustment Rider</b>              |  |                            |                              |                          |                |                       |
|---|--|----------------------------|------------------------------|--------------------------|----------------|-----------------------|
| <b>Fuel Price Variances and Rider F Collections</b> |  |                            |                              |                          |                |                       |
| <b>Combined Company Balances</b>                    |  |                            |                              |                          |                |                       |
|   |  | <b>Fuel Price Variance</b> | <b>RS 32 - SS Adjustment</b> | <b>Rider F Surcharge</b> | <b>Balance</b> | <b>Monthly change</b> |
| Jan-10  |  | 62,272                     | (9,969)                      | (133,631.71)             | 215,718        | (71,360)              |
| Feb-10  |  | 68,325                     | (10,746)                     | (107,872.83)             | 165,424        | (39,548)              |
| Mar-10  |  | 53,231                     | (12,815)                     | (104,456.91)             | 101,383        | (51,225)              |
| Apr-10  |  | 49,842                     | (9,410)                      | (104,071.06)             | 37,744         | (54,229)              |
| May-10  |  | 47,714                     | (7,763)                      | (91,873.86)              | (14,179)       | (44,160)              |
| Jun-10  |  | 49,966                     | (6,411)                      | (89,474.46)              | (60,098)       | (39,509)              |
| Jul-10  |  | 61,995                     | (5,050)                      | (20,568.17)              | (23,721)       | 41,427                |
| Aug-10  |  | 68,408                     | (4,249)                      | (21,752.92)              | 18,685         | 46,655                |
| Sep-10  |  | 48,036                     | (2,538)                      | (22,883.50)              | 41,300         | 25,153                |
| Oct-10  |  | 36,322                     | -                            | (24,336.18)              | 53,287         | 11,986                |
| Nov-10  |  | 23,745                     | -                            | (27,821.21)              | 49,210         | (4,077)               |
| <b>Dec-10</b>                                       |  | <b>30,270</b>              | <b>-</b>                     | <b>(31,216.32)</b>       | <b>48,263</b>  | <b>(947)</b>          |

**Reporting for First Quarter 2011**

| <b>Rider F - Fuel Adjustment Rider</b>              |  |                            |                              |                          |                |                       |
|---|--|----------------------------|------------------------------|--------------------------|----------------|-----------------------|
| <b>Fuel Price Variances and Rider F Collections</b> |  |                            |                              |                          |                |                       |
| <b>Combined Company Balances</b>                    |  |                            |                              |                          |                |                       |
|   |  | <b>Fuel Price Variance</b> | <b>RS 32 - SS Adjustment</b> | <b>Rider F Surcharge</b> | <b>Balance</b> | <b>Monthly change</b> |
| <b>Dec-10</b>                                       |  | <b>30,270</b>              | <b>-</b>                     | <b>(31,216)</b>          | <b>48,263</b>  | <b>(947)</b>          |
| Jan-11  |  | 5,305                      | -                            | (38,841)                 | 14,726         | (33,537)              |
| Feb-11  |  | (15,855)                   | -                            | (28,151)                 | (29,280)       | (44,006)              |
| Mar-11  |  | (70,809)                   | -                            | (33,793)                 | (133,882)      | (104,602)             |

## APPENDIX A - REVIEW OF REGULATORY CONTEXT

### 1. POLICY PROVISION FOR A FUEL ADJUSTMENT MECHANISM

Section 8 of OIC 1995/90 sets out the current Yukon Rate policy provision related to ongoing fuel price adjustments that may be made by the utilities from time to time without requirement for application to or approval by the Yukon Utilities Board (“YUB” or “Board”):

“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.”

Historically, a fuel adjustment mechanism has been in place in Yukon to provide for stability relative to swings in fuel prices since before the NCPC transfer<sup>9</sup>. In the Inquiry into Matters Relating to the Northern Canada Powers Commission, the National Energy Board recommended fuel adjustment clauses continue to be included in rate schedules to minimize risks, noting:

- “A fuel adjustment clause protects all parties from the risk inherent in having to forecast fuel prices up to a year in advance”; and
- “If fuel prices unfold as anticipated and a rate adjustment for fuel is not required no party is burdened by a utility having taken the precaution of including a fuel adjustment clause in its rate schedules<sup>10</sup>.”

Fuel adjustment provisions in use today (as set out in OIC 1995/90) have continued to be included in Yukon rate policy since the transfer of NCPC assets to Yukon. The authorization for these provisions has been granted via successive Orders in Council in place since 1988 (OIC 1988/150, OIC 1991/62 and current rate policy OIC 1995/90)<sup>11</sup>.

### 2. DIESEL FUEL PRICE VARIANCE ACCOUNT (DFPVA) TRANSACTIONS

Historically, both Companies have established and used a Deferral Fuel Price Variance Account (DFPVA) and two sets of transactions to implement the fuel price variance process:

1. **Transactions between the Companies and their respective DFPVA:** Deferral by each utility of variances (plus or minus) in fuel price per litre from GRA fuel prices.

<sup>9</sup> During the National Energy Board Inquiry into Matters Relating to the Northern Canada Powers Commission (June 1985), NCPC noted that in 1974/75 it introduced a fuel adjustment clause into its rate schedules to enable NCPC to adjust rates automatically as fuel prices varied from levels forecast when calculating rates for the year (at times when fuel prices were fluctuating widely and difficult to forecast with accuracy). While NCPC was not seeking continuance of this provision, noting “relative stability of fuel prices” at the time, the Board in its report recommended fuel adjustment clauses be included in rate schedules to minimize risks;

<sup>10</sup> National Energy Board “In the Matter of a Public Inquiry Into Matters Relating to the Northern Canada Powers Commission (June 1985).

<sup>11</sup> The wording included in OIC 1995/90 was also included in OIC 1991/62. Similar wording was also used on this matter in OIC 1988/150.

- a. **Diesel Fuel Price Variance** – The mechanics of the calculation of this variance is detailed in Section 1.0 of the policy.

Calculation of fuel price variances per OIC rate policy direction to the Companies commenced January 1, 1989<sup>12</sup>. The monthly shortfall continues to be calculated as described in the policy to determine the combined YEC and YECL shortfall. Historically, no material issues or concerns have been raised in regulatory review processes regarding the methodology underlying this calculation.

- b. **Rate Schedule 32 – Secondary Energy Rate Adjustment** – Secondary Sales is surplus or 'secondary energy' that may be made available at lower rates to qualifying General Service or Industrial customers, based on the availability of surplus hydro energy. Yukon Energy and Yukon Electrical only make secondary power available when it can be routinely supplied from surplus hydro as a revenue-positive sale<sup>13</sup>.

In 2005, the YUB approved provisions to allow quarterly adjustments to the secondary sales rate charged by Yukon Energy Corporation to reflect ongoing changes to retail heating fuel prices<sup>14</sup>. For each kW.h actually sold to secondary sales customers, the difference between the GRA-approved rate and quarterly adjusted rate is charged/credited to the DFPVA. As with the diesel fuel price variance transaction, the secondary energy rate adjustment transaction ensures the utility is not at risk for retail fuel price changes (which form the basis for secondary energy quarterly rate changes).

Since 2005, the DFPVA has been used to address fuel price related variance in income for Yukon Energy Corporation and to normalize the secondary sales revenues to the benefit of both ratepayers and Yukon Energy Corporation, acting as a natural hedge to the DFPVA, and reducing the variability that would otherwise be charged through this joint Yukon Energy/YECL rate rider. Specifically, if the price of heating oil rises due to world oil prices increasing, revenues from secondary sales will rise, but so will the costs of generating electricity in Yukon with increased diesel fuel prices (primarily in the Yukon Electrical served communities). This will result in both credits and charges to the DFPVA – credits due to increased secondary sales revenues and charges due to increased diesel prices. Decreases in world oil prices will have an opposite result.

At this time, only Yukon Energy Corporation has secondary sales that are subject to this adjustment; YECL is not affected. This more recent addition to the DFPVA (since 2005) is based on approval of the Board (in Order 2005-12) rather than an OIC direction.

2. **Transactions between Ratepayers and the Combined Companies' DFPVA:** Where the combined balances in the Companies' DFPVAs trend outside defined boundaries, provision for a rate adjustment rider (Rider F) to collect or refund the balances to customers in a stable fashion.

<sup>12</sup> IR WHSE.YEC-8 filed in 1991/92 General Rate Application provides continuity schedule of fuel price variance for period from 1989 to 1990.

<sup>13</sup> If diesel is being operated for any material length of time, a secondary sales interruption will be initiated.

<sup>14</sup> Approved in Order 2005-12.

- a. Rider F – Fuel Adjustment Rider** – Rider F is the rate mechanism used to collect/reimburse the fuel price variance from/to customers. Since the late 1980's the Rider F included in rates schedules has remained in essentially the same form<sup>15</sup>:
- i. Available to all classes of electric service throughout the Territory (except Rate Schedule 32 Secondary Energy).
  - ii. Service rendered at the applicable rates with the surcharge/refund to cover change in the unit cost of fuel – the rate schedule notes “an adjustment of X.X cents per kW.h applied to all kW.h consumed<sup>16</sup>”. However, the rate schedule also provides for the Companies to change this adjustment from time to time as required (see below).
  - iii. The Rider notes 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”.
  - iv. The timing of Rider F adjustments was addressed in the 1991/92 GRA<sup>17</sup>. In Order 1992-1, the Board considered the wording of Rider F that “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,” and concluded that “any changes in the Company’s fuel cost should be dealt with in a timely manner”. The Board directed YEC to calculate and file a rider designed to recover the unfavourable variance balance as at December 31, 1991 over a twelve month period commencing with billings on and after February 1, 1992. The Board also directed the Company to file on a monthly basis commencing in January 1992 a calculation of the fuel price variance and to establish procedures to collect (refund) any fuel variance on a timely basis.
  - v. Since the 2008/2009 General Rate Application, a Fixed Rider F has been applicable to Rate Schedule 39 - Industrial Primary Rate customers. This adjustment is required due to OIC 2007/94 which requires “Rider F applied to energy charges only, set to \$0.0 for fuel price forecast filed November 20, 2006”.
  - vi. A Fixed Rider F adjustment is required to provide a reconciliation between the Rider F rate change notification of November 20, 2006 and subsequent Rider F Surcharge rates whenever the YUB approves revised GRA fuel prices for YEC. A Rider F Surcharge is set at \$0.00 for the fuel price forecast filed November 20, 2006. Once the Fixed rate adjustment is implemented, Industrial Customers are on the same footing as other customers as at the 2008/2009 GRA and charged

<sup>15</sup> Order 1989-1 and Order 1990-2 each include Rider F schedules which are essentially in the same form as the Rider F included in current approved rate schedules.

<sup>16</sup> Current Rider F notes rate of 0.352 c/kW.h; however, this rate will change from time to time.

<sup>17</sup> The GRA Application noted that by the end of 1990 fuel costs exceeding those included in rates (of \$544,190) were included as a deferred charge on YEC’s 1990 balance sheet. The Companies indicated that the variance in the fuel adjustment account at the end of October 1991 was \$783,000 and that the \$544,190 of the variance would be collected over a six month period commencing in 1993.

the standard Rider F Surcharge rate. In accordance with its GRA filing as approved by the Board in Order 2009-8 and 2009-10, YEC treats Rider F Fixed rate collections as income and does not include these collections as part of the Rider F Surcharge [as approved in Board Order 2009-8 and 2010-13]. This is effectively an adjustment to the base fuel price applicable to the Industrial rate.

In sum, each company maintains a DFPVA for tracking transactions relative to its operations and accounting for deferred fuel price variance has no effect on the net earnings of the utility. Ratepayers pay rates that reflect the actual fuel costs per litre incurred by the Companies, regardless of GRA forecast prices.

### 3. TIMING AND QUANTUM OF RIDER F ADJUSTMENTS

Subsequent to Rider F adjustments addressed in the 1991/92 GRA, the 1993/94 GRA noted that due to favourable fuel prices in 1992, the Rider F was terminated (set to zero) in November 1992. The 1996/97 GRA Application noted that Rider F had not been used since 1992 and over the period from 1993-1995 the rider was set to 0.0 cents/kW.h. The Companies noted during the 1996/97 GRA that the Rider remained available “in the event of significant variance between fuel price implicit in the Companies rates and the actual fuel price<sup>18</sup>.”

Yukon Energy and YECL recommenced Rider F collections from all retail customers December 2000, providing routine updates to the YUB.

- In December 2000, the Rider F rate was established at 0.5924 cents/kW.h for all retail sales with the exception of secondary sales.
- In April 2002, Rider F was revised to 0.2214 cents/kW.h.
- In March 2003 Rider F was revised to 0.5867 cents/kW.h.

The 2005 Required Revenues and Related Matters Application noted at May 2003 the combined Yukon Energy/YECL Rider F accounts hit a high balance of about \$635,000 owing from customers, and afterwards the balance was drawn down materially to below \$50,000, and charges to the Rider F account were materially reduced after the Mayo Dawson Transmission Line (MDTL) came into service in September 2003<sup>19</sup>. Yukon Energy’s annual charges to the Rider F account during the years prior to the Mayo Dawson Project’s completion were between \$300,000 and \$500,000, and in 2004 absent the Mayo-Dawson Project the Rider F charges for Yukon Energy would have been expected to have been upwards of \$890,000.

**Table 1** sets out the history of Rider F adjustments since 2005 and notes a series of incrementally higher collection riders (increasing from 0.791 c/kW.h in July 2005 to 1.86 c/kW.h in August 2008). Rider F was re-set to zero in March 2009 and from December 2009 until June 2011 there have been a series of refund

<sup>18</sup> IR UCG-YEC/YECL-1-55 filed in the 1996/97 General Rate Application.

<sup>19</sup> This reduction in charges to the account reflected the fact that with the MDTL in place surplus hydro generation could be used to displace material diesel fuel generation in Dawson.

riders (from 0.386 c/kW.h in December 2009 to 0.09 c/kW.h in July 2010. Effective July 1, 2011 a collection rider of 0.352 c/kW.h is in effect).

**Table 1: Rider F Adjustments 2005 to 2011**

| Date      | DFPV Account Balance | Variances During Forecast Period | Total Amounts | Rider F Rate |
|-----------|----------------------|----------------------------------|---------------|--------------|
| 01-Jun-11 | 283,517              | 1,142,583                        | 1,426,100     | 0.35         |
| 01-Jul-10 | -19,278              | -293,701                         | -312,979      | -0.09        |
| Jan-10    | -349,021             | -225,133                         | -574,154      | -0.35        |
| Dec-09    | -348,951             | -230,393                         | -579,344      | -0.39        |
| Mar-09    | -305,186             | 305,186                          | 0             | 0.00         |
| Aug-08    | 504,626              | 5,068,321                        | 5,572,947     | 1.86         |
| May-08    | 224,616              | 3,482,674                        | 3,707,290     | 1.23         |
| Dec-06    | 34,538               | 2,744,022                        | 2,778,560     | 0.96         |
| Mar-06    | 635,809              | 2,958,752                        | 3,594,561     | 1.28         |
| Jul-05    | 290,742              | 1,882,172                        | 2,172,914     | 0.79         |

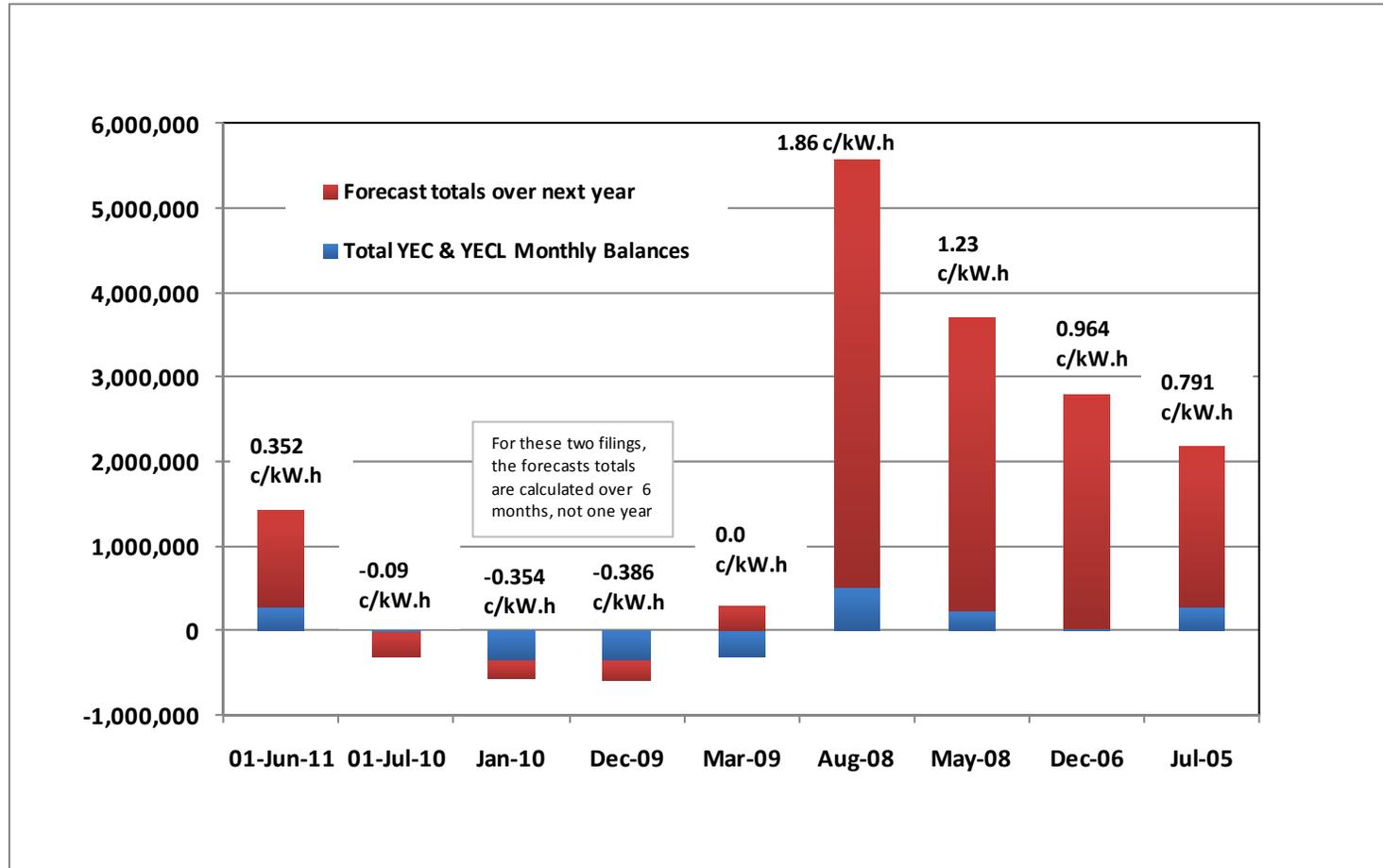
**Note: For December 2009 and January 2010 the values indicated above are for 6 month forecasts.**

In the interest of long term rate stability, the objective of the Companies is to administer a Rider F rate which will be in effect for a year or longer while also keeping the Diesel Fuel Price Adjustment account within a defined range of +/- \$200,000. This requires the Companies to calculate a Rider F rate that will result in forecast collections equal to the current balance of the Diesel Fuel Price Accounts for both Companies, plus the net of the forecast diesel fuel price variances and RS 32 Secondary Sales Adjustments expected to be encountered during a forecast period to bring the DFPVA back to zero - typically within one year. Throughout the period reviewed, the DFPVA balance, as well as the forecast period price variance impact, have been calculated based on actual sales (for the balance and to date) and current forecasts of actual sales (for the forecast period price variance impact).

**Figure 1** illustrates the Rider F adjustments provided in Table 1. This figure sets out in blue the total actual YEC and YECL DFPVA balances at that time, and in red the forecast variances to be collected over the forecast period<sup>20</sup> (with the Rider F values set to address both the then-current actual balance (blue) plus the forecast variances (red)). The forecast totals to be collected over the forecast period tend to be the majority of the amounts to be collected through the rider, with YEC and YECL opening actual DFPVA balances forming a very small portion of the total to be collected. In practice the total DFPVA balances each year have not materially driven Rider F collections or any degree of rate instability; overall any instability in the Rider F charges have been driven by required collections forecast over the forecast period arising from uncontrollable fuel price variances, not deferred balances.

<sup>20</sup> In two cases the values are for 6 month forecasts for specific reasons relating to GRA timing.

**Figure 1: Rider F Adjustments 2005 to 2011**





YUKON  
ENERGY



**YUKON ENERGY CORPORATION**

**&**



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

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

**June 30 January 20, 2011 2012**



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

### **PURPOSE**

To describe the process for deferring, monitoring, collecting and remitting fuel price variance amounts for diesel fuel consumed to generate electricity.

### **BACKGROUND**

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

A Deferral Fuel Price Variance Account (DFPVA) was established by each Company to implement the fuel price variance process. It comprises two sets of transactions:

- 1) **Transactions between the Companies and their respective DFPVA:** Deferral by each utility of variances (plus or minus) in fuel price per litre from GRA forecast fuel prices. Further explanation provided in Section 1.1 and 1.2 of the Management Policy.
- 2) **Transactions between Ratepayers and the combined Companies’ DFPVA:** Where the combined balances in the Companies’ DFPVAs trend outside defined boundaries, provision for a rate adjustment rider (Rider F) to collect or refund the balances to customers in a stable fashion. Further explanation of transactions is provided in Section 1.3 and 2.0 of the Management Policy.

On this basis ratepayers pay overall rates<sup>1</sup> that reflect the actual fuel costs per litre incurred by the Companies, regardless of GRA forecast prices.

There are three activities relevant to the administration of the DFPVA.

- ***Diesel Fuel Price Variance*** – For each actual litre of diesel consumed to generate electricity, the difference between the actual weighted average cost per litre of fuel consumed and the most recent GRA-approved fuel price is recorded in the DFPVA. The variance applies to actual diesel fuel consumed (all fuel consumed) when calculating additions or deletions to the account, i.e. the Companies remain at risk (at GRA-approved fuel prices) for changes in volume from the GRA forecast. Further explanation provided in Section 1.1.

<sup>1</sup> Base rates as approved at the last GRA plus Rider F as adjusted from time to time.



- **Rate Schedule 32 – Secondary Energy Rate Adjustment<sup>2</sup>** – For each kW.h sold to secondary sales customers, the difference between the GRA-approved rate and quarterly adjusted rate is charged/credited to the DFPVA. At this time, only Yukon Energy Corporation has secondary sales that are subject to this adjustment; YECL is not affected. This was a more recent addition to the DFPVA (since 2005) and is based on approval of the Yukon Utilities Board<sup>3</sup> rather than an OIC direction. As with the diesel fuel price variance transaction, the secondary energy rate adjustment transaction ensures the utility is not at risk for retail fuel price changes (which form the basis for secondary energy quarterly rate changes). Further explanation provided in Section 1.2 of the Management Policy.
- **Rider F - Fuel Adjustment Rider** (as displayed on customers' bills) – Is the rate mechanism used to collect/reimburse the net fuel price variance from/to customers. Further explanation provided in Section 1.3 and Section 2.0 of the Management Policy.

Each Company maintains a DFPVA for tracking transactions relative to its operations. The accounting for deferred fuel price variance has no effect on the net earnings of the utility. The detailed accounting is described below.

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<sup>2</sup> Secondary Sales is surplus or 'secondary energy' that may be made available at lower rates to qualifying General Service or Industrial customers, based on the availability of surplus hydro energy. Since 2005, the Rider F Deferred Fuel Price mechanism is used to normalize the secondary sales revenues to the benefit of both ratepayers and Yukon Energy Corporation. This acts as a natural hedge to the Rider F account, reducing the variability that would otherwise be charged through this joint Yukon Energy/YECL rate rider.

<sup>3</sup> In Order 2005-12 following Required Revenues and Related Matters proceeding.



## **MANAGEMENT POLICY**

### **1.0 ACTIVITIES RELEVANT TO ADMINISTRATION OF DFPVA**

#### **1.1 Diesel Fuel Price Variance Calculation**

- 1.1.1 Actual diesel fuel purchases are recorded, as incurred, into inventory for each Company. The purchase price is blended with existing inventory value to arrive at the weighted average cost per litre.
- 1.1.2 Each Company maintains a Fuel Expense Account.
- 1.1.3 Each month, actual fuel consumption is recorded as an expense at the weighted average cost in the Fuel Expense Account.
- 1.1.4 At the end of each month, the difference between the actual fuel cost, and the YUB approved cost/litre is adjusted to each Company's Diesel Fuel Price Variance Account and offset to sales margin (sales less cost of goods sold). The end result being each Company maintains visibility regarding the actual fuel cost, with the fuel variance being adjusted on the financial statements of each company resulting in sales margin at the GRA approved costs/litre for actual fuel consumed.

#### **1.2 Rate Schedule 32 – Secondary Energy Rate Adjustment**

Secondary Energy Rate Adjustment from the Rate Schedule 32 rate approved for the YEC-approved revenue requirement for actual YEC wholesale or retail secondary sales.

- 1.2.1 Each quarter<sup>4</sup> the secondary sales rate is adjusted via an automatic adjustment mechanism<sup>5</sup>.
- 1.2.2 The secondary sales revenues are recorded in revenue accounts at the GRA approved 'base rate', regardless of the changes in the actual quarterly secondary sales rate charged.
- 1.2.3 The Rate Schedule 32 – Secondary Energy Adjustment (i.e., the difference between the 'base rate' and the adjusted quarterly rate) is transferred to, or withdrawn from, the Diesel Fuel Price Variance account. In this manner the secondary sales adjustment serves as an offset to the diesel fuel price

<sup>4</sup> The Secondary Energy Charge for any three month Rate Period, starting January 1, 2005 and adjusted thereafter on the first day of every third subsequent month (i.e., on April 1, July 1 and October 1 in 2005 and similarly in each following year).

<sup>5</sup> As approved in Order 2005-12, the price will be adjusted based on the lowest of the three most recent Yukon Bureau of Statistics bi-weekly furnace oil prices for Whitehorse as of the 20th day of November, February, May and August for the respective upcoming quarter. This fuel oil price per litre will be converted to an equivalent cost of electricity using the parameters noted above, and the base rate for retail secondary sales will be set at the 66.7% ratio.



component (i.e., higher oil prices lead to credits to the account for secondary sales).

### 1.3 Rider F - Fuel Price Adjustment Rider

The Companies recover/refund the variances accumulated in the Diesel Fuel Price Variance Account through the '*Rider F*' – *Fuel Adjustment Rider* surcharge.

- 1.3.1 A Rider F rate to recover (or refund) the overall outstanding and forecast consolidated YEC/YECL Rider F variance is calculated by the Companies from time to time<sup>6</sup> on a Yukon-wide basis.
- 1.3.2 The Rider F rate (or refund) is applicable to each kW.h sold for firm retail sales.
  - 1.3.2.1 The same rate applies per kW.h for all sales regardless of rate block to all retail customers of both utilities [i.e., residential and general service customers for government and non-government customer classes, as well as street and space lights and industrial].
  - 1.3.2.2 The value of the rate/(refund) is determined via the Rate Change Calculation Process (see below for explanation of this process).
  - 1.3.2.3 No Rider F charge applies to secondary sales (Rate Schedule 32 and 35) or wholesale sales (Rate Schedule 42).
- 1.3.3 A fixed Rider F is applicable to Rate Schedule 39 - Industrial Primary Rate<sup>7</sup> customers.
- 1.3.4 Inter-company transfers shift a portion of the monthly Rider F collections between the Companies.
  - 1.3.4.1 Inter-company transfers ensure that neither Company is carrying a disproportionate share of the cumulative balance of the DFPVA.
  - 1.3.4.2 These transfers between Companies are necessary as there is always a mis-match between which company consumes the generation fuel versus the company with the higher collections of Rider F revenues from customers. Typically, when there is a reliance on diesel generation to serve customers, YECL has the larger customer base which provides it with the larger portion of Rider F collections while YEC incurs the larger diesel fuel price variance when there is a reliance on diesel generation to serve customers.

<sup>6</sup> As balances warrant; see section 4.0 for specifics of this review process.

<sup>7</sup> Further detail provided in Appendix A- Regulatory Context.



## 2.0 TRANSACTIONS BETWEEN RATEPAYERS & THE COMBINED COMPANIES' DFPVA

### 2.1 Rider F – Timing & Quantum of Rider F Collections

The objective of the Companies is to administer a Rider F rate which will be in effect for a year or longer while also keeping the combined Companies' Diesel Fuel Price Adjustment Account (DFPVAs) within a defined range of +/- \$200,000. This requires the Companies to calculate a Rider F rate that will result in forecast collections equal to the current balance of the Diesel Fuel Price Accounts for both Companies, plus the net of the forecast diesel fuel price variances and RS 32 Secondary Sales Adjustments expected to be encountered during the forecast period to bring the DFPVA back to zero - typically within one year.

The Companies work together to produce a consolidated Rider F rate calculation. Each company completes an analysis comprised of the following:

- 2.1.1 Actual Diesel Fuel Price Variance account balance for month end prior to proposed Effective Date for new Rider F rate.
- 2.1.2 Estimated net value of monthly diesel fuel price variance and Rider F collections at current Rider F rate for the period preceding the proposed Effective Date for the new Rider F rate.
- 2.1.3 Monthly Shortfall of forecast diesel price less GRA price times forecast volume of diesel generation to determine an estimated monthly diesel fuel price variance.
- 2.1.4 Forecast RS 32 - Secondary Sales Retail Rate less the GRA approved Secondary Sales Rate times the forecast secondary sales to determine the RS 32 Secondary Energy Adjustment (YEC only).
- 2.1.5 The combined Diesel Fuel Price Variance from both Companies as determined from the components above is then divided by the total forecast sales for the forecast period to result in the new Rider F rate.

The Companies will use best judgment to determine the timing of any collection/refund rider; ~~recognizing that at times filings may need to be deferred and balances may exceed the optimal range of +/- \$200,000.~~

- 2.1.6 When the balance in the DFPVA approaches or reaches the \$200,000 threshold, the Companies will inform the Board and interested parties of the Companies' intentions to implement a Rider F rate change to address the outstanding balance.



~~2.1.6~~2.1.7 If the pooled balance of the Companies' Diesel Fuel Price Accounts is fluctuating over a broad range, the Companies refine the forecast variables to reflect changing economic conditions to arrive at a new Rider F rate. Note - economic events<sup>8</sup> can result in the Rider F rate falling short or exceeding the forecast estimates to be trued up in later adjustments.

~~2.1.7~~ In any event, when balances in the account grow to a range of +/- \$400,000 the Companies will adjust Rider F at the earliest feasible date thereafter and will use a shorter forecast period (typically 6 months) to accelerate the process of bringing the DFPVA back to zero.

2.1.8 Once the combined DFPVAs approach zero the rider will be adjusted using current fuel prices and economic conditions.

## 2.2 Reporting to YUB And Interested Parties

When a new Rider F rate is required a rate change advisory letter is cosigned by the Companies and sent to the YUB as information with the detailed calculation attached (example provided at as Exhibit 1).

2.2.1 The Companies typically provide the YUB with approximately 30 days notice before the Effective Date for implementation of the new rate. The short notification period improves the accuracy of the rate estimate relative to the forecast.

~~2.2.1~~

2.2.2 Consistent with the YUB directive in its Reasons for Decision for YUB 2010-13, Rider F account balances will be presented in a table (a sample is attached as Exhibit 2) which will be updated quarterly, filed with the YUB and posted concurrently on each Company's website for easy public access.

2.2.3 The table as presented in Exhibit 2 reflects the reporting format for the full year of 2010 and is followed by the table as will be presented to report for the first quarter of 2011.

2.2.4 When providing the Board with the change advisory letter, the Companies will also notify interested parties as defined by the Companies' 2009 Phase II Rate Application process, or most recent application process.

2.2.5 When submitting the change advisory letter and quarterly filings, the Companies will provide accompanying EXCEL spreadsheets with supporting calculations,

<sup>8</sup> For example, diesel price volatility over the forecast period; actual diesel generation being greater or less than forecast generation; customer sales being greater or less than forecast; secondary sales rates or sales to customers being greater or less than forecast.



formulas and linkages to assist the reader (in a format similar to that provided in YUB-YECL/YECL-2-2 and YUB-YEC/YECL-2-3 filed during the YEC & YECL Rider F – Fuel Adjustment Rider & Deferred Fuel Price Variance Policy proceeding.

### EXHIBIT 1 - SAMPLE RATE CHANGE ADVISORY TO YUB

**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**

|  | <b>Fuel Price<br/>in Rates</b> | <b>Forecast<br/>Fuel Price</b> | <b>Forecast<br/>Litres</b> | <b>Monthly<br/>Shortfall</b> |         |
|--|--------------------------------|--------------------------------|----------------------------|------------------------------|---------|
| Due From (To) Customers - as at April 30, 2011 |                                |                                |                            |                              | 139,133 |
| 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                      | 795,332 |

**YECL Shortfall (Over-collection)**

**934,465**

**Yukon Energy Corporation**

|  | <b>Fuel Price<br/>in Rates</b>   | <b>Forecast<br/>Fuel Price</b> | <b>Forecast<br/>Litres</b> | <b>Monthly<br/>Shortfall</b> | <b>Secondary<br/>Sales Adjmt</b> |         |
|--|----------------------------------|--------------------------------|----------------------------|------------------------------|----------------------------------|---------|
| 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                      | -                                | 347,251 |

**YEC Shortfall (Over-collection)**

**491,635**

**Combined YEC/YECL Shortfall (Over-collection)**

**1,426,100**

Forecast Retail Sales (kW.h's) - May 2011- May 2012

|              |             |
|--------------|-------------|
| YECL         | 322,818,549 |
| YEC - Retail | 82,208,215  |
| Total        | 405,026,763 |

**Rider F Rate** - price per kW.h (cents) to recover forecast shortfall by May 31,2012

**0.352100106**

**EXHIBIT 2**  
**RIDER F – FUEL ADJUSTMENT RIDER**  
**QUARTERLY AND ANNUAL REPORTING FORMATS**

**Reporting format for Full Year 2010**

| <b>Rider F - Fuel Adjustment Rider</b>              |  |                            |                              |                          |                |                       |
|---|--|----------------------------|------------------------------|--------------------------|----------------|-----------------------|
| <b>Fuel Price Variances and Rider F Collections</b> |  |                            |                              |                          |                |                       |
| <b>Combined Company Balances</b>                    |  |                            |                              |                          |                |                       |
|   |  | <b>Fuel Price Variance</b> | <b>RS 32 - SS Adjustment</b> | <b>Rider F Surcharge</b> | <b>Balance</b> | <b>Monthly change</b> |
| Jan-10  |  | 62,272                     | (9,969)                      | (133,631.71)             | 215,718        | (71,360)              |
| Feb-10  |  | 68,325                     | (10,746)                     | (107,872.83)             | 165,424        | (39,548)              |
| Mar-10  |  | 53,231                     | (12,815)                     | (104,456.91)             | 101,383        | (51,225)              |
| Apr-10  |  | 49,842                     | (9,410)                      | (104,071.06)             | 37,744         | (54,229)              |
| May-10  |  | 47,714                     | (7,763)                      | (91,873.86)              | (14,179)       | (44,160)              |
| Jun-10  |  | 49,966                     | (6,411)                      | (89,474.46)              | (60,098)       | (39,509)              |
| Jul-10  |  | 61,995                     | (5,050)                      | (20,568.17)              | (23,721)       | 41,427                |
| Aug-10  |  | 68,408                     | (4,249)                      | (21,752.92)              | 18,685         | 46,655                |
| Sep-10  |  | 48,036                     | (2,538)                      | (22,883.50)              | 41,300         | 25,153                |
| Oct-10  |  | 36,322                     | -                            | (24,336.18)              | 53,287         | 11,986                |
| Nov-10  |  | 23,745                     | -                            | (27,821.21)              | 49,210         | (4,077)               |
| <b>Dec-10</b>                                       |  | <b>30,270</b>              | <b>-</b>                     | <b>(31,216.32)</b>       | <b>48,263</b>  | <b>(947)</b>          |

**Reporting for First Quarter 2011**

| <b>Rider F - Fuel Adjustment Rider</b>              |  |                            |                              |                          |                |                       |
|---|--|----------------------------|------------------------------|--------------------------|----------------|-----------------------|
| <b>Fuel Price Variances and Rider F Collections</b> |  |                            |                              |                          |                |                       |
| <b>Combined Company Balances</b>                    |  |                            |                              |                          |                |                       |
|   |  | <b>Fuel Price Variance</b> | <b>RS 32 - SS Adjustment</b> | <b>Rider F Surcharge</b> | <b>Balance</b> | <b>Monthly change</b> |
| <b>Dec-10</b>                                       |  | <b>30,270</b>              | <b>-</b>                     | <b>(31,216)</b>          | <b>48,263</b>  | <b>(947)</b>          |
| Jan-11  |  | 5,305                      | -                            | (38,841)                 | 14,726         | (33,537)              |
| Feb-11  |  | (15,855)                   | -                            | (28,151)                 | (29,280)       | (44,006)              |
| Mar-11  |  | (70,809)                   | -                            | (33,793)                 | (133,882)      | (104,602)             |

## APPENDIX A - REVIEW OF REGULATORY CONTEXT

### 1. POLICY PROVISION FOR A FUEL ADJUSTMENT MECHANISM

Section 8 of OIC 1995/90 sets out the current Yukon Rate policy provision related to ongoing fuel price adjustments that may be made by the utilities from time to time without requirement for application to or approval by the Yukon Utilities Board (“YUB” or “Board”):

“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.”

Historically, a fuel adjustment mechanism has been in place in Yukon to provide for stability relative to swings in fuel prices since before the NCPC transfer<sup>9</sup>. In the Inquiry into Matters Relating to the Northern Canada Powers Commission, the National Energy Board recommended fuel adjustment clauses continue to be included in rate schedules to minimize risks, noting:

- “A fuel adjustment clause protects all parties from the risk inherent in having to forecast fuel prices up to a year in advance”; and
- “If fuel prices unfold as anticipated and a rate adjustment for fuel is not required no party is burdened by a utility having taken the precaution of including a fuel adjustment clause in its rate schedules<sup>10</sup>.”

Fuel adjustment provisions in use today (as set out in OIC 1995/90) have continued to be included in Yukon rate policy since the transfer of NCPC assets to Yukon. The authorization for these provisions has been granted via successive Orders in Council in place since 1988 (OIC 1988/150, OIC 1991/62 and current rate policy OIC 1995/90)<sup>11</sup>.

### 2. DIESEL FUEL PRICE VARIANCE ACCOUNT (DFPVA) TRANSACTIONS

Historically, both Companies have established and used a Deferral Fuel Price Variance Account (DFPVA) and two sets of transactions to implement the fuel price variance process:

1. **Transactions between the Companies and their respective DFPVA:** Deferral by each utility of variances (plus or minus) in fuel price per litre from GRA fuel prices.

<sup>9</sup> During the National Energy Board Inquiry into Matters Relating to the Northern Canada Powers Commission (June 1985), NCPC noted that in 1974/75 it introduced a fuel adjustment clause into its rate schedules to enable NCPC to adjust rates automatically as fuel prices varied from levels forecast when calculating rates for the year (at times when fuel prices were fluctuating widely and difficult to forecast with accuracy). While NCPC was not seeking continuance of this provision, noting “relative stability of fuel prices” at the time, the Board in its report recommended fuel adjustment clauses be included in rate schedules to minimize risks;

<sup>10</sup> National Energy Board “In the Matter of a Public Inquiry Into Matters Relating to the Northern Canada Powers Commission (June 1985).

<sup>11</sup> The wording included in OIC 1995/90 was also included in OIC 1991/62. Similar wording was also used on this matter in OIC 1988/150.

- a. **Diesel Fuel Price Variance** – The mechanics of the calculation of this variance is detailed in Section 1.0 of the policy.

Calculation of fuel price variances per OIC rate policy direction to the Companies commenced January 1, 1989<sup>12</sup>. The monthly shortfall continues to be calculated as described in the policy to determine the combined YEC and YECL shortfall. Historically, no material issues or concerns have been raised in regulatory review processes regarding the methodology underlying this calculation.

- b. **Rate Schedule 32 – Secondary Energy Rate Adjustment** – Secondary Sales is surplus or 'secondary energy' that may be made available at lower rates to qualifying General Service or Industrial customers, based on the availability of surplus hydro energy. Yukon Energy and Yukon Electrical only make secondary power available when it can be routinely supplied from surplus hydro as a revenue-positive sale<sup>13</sup>.

In 2005, the YUB approved provisions to allow quarterly adjustments to the secondary sales rate charged by Yukon Energy Corporation to reflect ongoing changes to retail heating fuel prices<sup>14</sup>. For each kW.h actually sold to secondary sales customers, the difference between the GRA-approved rate and quarterly adjusted rate is charged/credited to the DFPVA. As with the diesel fuel price variance transaction, the secondary energy rate adjustment transaction ensures the utility is not at risk for retail fuel price changes (which form the basis for secondary energy quarterly rate changes).

Since 2005, the DFPVA has been used to address fuel price related variance in income for Yukon Energy Corporation and to normalize the secondary sales revenues to the benefit of both ratepayers and Yukon Energy Corporation, acting as a natural hedge to the DFPVA, and reducing the variability that would otherwise be charged through this joint Yukon Energy/YECL rate rider. Specifically, if the price of heating oil rises due to world oil prices increasing, revenues from secondary sales will rise, but so will the costs of generating electricity in Yukon with increased diesel fuel prices (primarily in the Yukon Electrical served communities). This will result in both credits and charges to the DFPVA – credits due to increased secondary sales revenues and charges due to increased diesel prices. Decreases in world oil prices will have an opposite result.

At this time, only Yukon Energy Corporation has secondary sales that are subject to this adjustment; YECL is not affected. This more recent addition to the DFPVA (since 2005) is based on approval of the Board (in Order 2005-12) rather than an OIC direction.

2. **Transactions between Ratepayers and the Combined Companies' DFPVA:** Where the combined balances in the Companies' DFPVAs trend outside defined boundaries, provision for a rate adjustment rider (Rider F) to collect or refund the balances to customers in a stable fashion.

<sup>12</sup> IR WHSE.YEC-8 filed in 1991/92 General Rate Application provides continuity schedule of fuel price variance for period from 1989 to 1990.

<sup>13</sup> If diesel is being operated for any material length of time, a secondary sales interruption will be initiated.

<sup>14</sup> Approved in Order 2005-12.

- a. Rider F – Fuel Adjustment Rider** – Rider F is the rate mechanism used to collect/reimburse the fuel price variance from/to customers. Since the late 1980's the Rider F included in rates schedules has remained in essentially the same form<sup>15</sup>:
- i. Available to all classes of electric service throughout the Territory (except Rate Schedule 32 Secondary Energy).
  - ii. Service rendered at the applicable rates with the surcharge/refund to cover change in the unit cost of fuel – the rate schedule notes “an adjustment of X.X cents per kW.h applied to all kW.h consumed<sup>16</sup>”. However, the rate schedule also provides for the Companies to change this adjustment from time to time as required (see below).
  - iii. The Rider notes 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”.
  - iv. The timing of Rider F adjustments was addressed in the 1991/92 GRA<sup>17</sup>. In Order 1992-1, the Board considered the wording of Rider F that “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,” and concluded that “any changes in the Company’s fuel cost should be dealt with in a timely manner”. The Board directed YEC to calculate and file a rider designed to recover the unfavourable variance balance as at December 31, 1991 over a twelve month period commencing with billings on and after February 1, 1992. The Board also directed the Company to file on a monthly basis commencing in January 1992 a calculation of the fuel price variance and to establish procedures to collect (refund) any fuel variance on a timely basis.
  - v. Since the 2008/2009 General Rate Application, a Fixed Rider F has been applicable to Rate Schedule 39 - Industrial Primary Rate customers. This adjustment is required due to OIC 2007/94 which requires “Rider F applied to energy charges only, set to \$0.0 for fuel price forecast filed November 20, 2006”.
  - vi. A Fixed Rider F adjustment is required to provide a reconciliation between the Rider F rate change notification of November 20, 2006 and subsequent Rider F Surcharge rates whenever the YUB approves revised GRA fuel prices for YEC. A Rider F Surcharge is set at \$0.00 for the fuel price forecast filed November 20, 2006. Once the Fixed rate adjustment is implemented, Industrial Customers are on the same footing as other customers as at the 2008/2009 GRA and charged

<sup>15</sup> Order 1989-1 and Order 1990-2 each include Rider F schedules which are essentially in the same form as the Rider F included in current approved rate schedules.

<sup>16</sup> Current Rider F notes rate of 0.352 c/kW.h; however, this rate will change from time to time.

<sup>17</sup> The GRA Application noted that by the end of 1990 fuel costs exceeding those included in rates (of \$544,190) were included as a deferred charge on YEC’s 1990 balance sheet. The Companies indicated that the variance in the fuel adjustment account at the end of October 1991 was \$783,000 and that the \$544,190 of the variance would be collected over a six month period commencing in 1993.

the standard Rider F Surcharge rate. In accordance with its GRA filing as approved by the Board in Order 2009-8 and 2009-10, YEC treats Rider F Fixed rate collections as income and does not include these collections as part of the Rider F Surcharge [as approved in Board Order 2009-8 and 2010-13]. This is effectively an adjustment to the base fuel price applicable to the Industrial rate.

In sum, each company maintains a DFPVA for tracking transactions relative to its operations and accounting for deferred fuel price variance has no effect on the net earnings of the utility. Ratepayers pay rates that reflect the actual fuel costs per litre incurred by the Companies, regardless of GRA forecast prices.

### 3. TIMING AND QUANTUM OF RIDER F ADJUSTMENTS

Subsequent to Rider F adjustments addressed in the 1991/92 GRA, the 1993/94 GRA noted that due to favourable fuel prices in 1992, the Rider F was terminated (set to zero) in November 1992. The 1996/97 GRA Application noted that Rider F had not been used since 1992 and over the period from 1993-1995 the rider was set to 0.0 cents/kW.h. The Companies noted during the 1996/97 GRA that the Rider remained available “in the event of significant variance between fuel price implicit in the Companies rates and the actual fuel price<sup>18</sup>.”

Yukon Energy and YECL recommenced Rider F collections from all retail customers December 2000, providing routine updates to the YUB.

- In December 2000, the Rider F rate was established at 0.5924 cents/kW.h for all retail sales with the exception of secondary sales.
- In April 2002, Rider F was revised to 0.2214 cents/kW.h.
- In March 2003 Rider F was revised to 0.5867 cents/kW.h.

The 2005 Required Revenues and Related Matters Application noted at May 2003 the combined Yukon Energy/YECL Rider F accounts hit a high balance of about \$635,000 owing from customers, and afterwards the balance was drawn down materially to below \$50,000, and charges to the Rider F account were materially reduced after the Mayo Dawson Transmission Line (MDTL) came into service in September 2003<sup>19</sup>. Yukon Energy’s annual charges to the Rider F account during the years prior to the Mayo Dawson Project’s completion were between \$300,000 and \$500,000, and in 2004 absent the Mayo-Dawson Project the Rider F charges for Yukon Energy would have been expected to have been upwards of \$890,000.

**Table 1** sets out the history of Rider F adjustments since 2005 and notes a series of incrementally higher collection riders (increasing from 0.791 c/kW.h in July 2005 to 1.86 c/kW.h in August 2008). Rider F was re-set to zero in March 2009 and from December 2009 until June 2011 there have been a series of refund

<sup>18</sup> IR UCG-YEC/YECL-1-55 filed in the 1996/97 General Rate Application.

<sup>19</sup> This reduction in charges to the account reflected the fact that with the MDTL in place surplus hydro generation could be used to displace material diesel fuel generation in Dawson.

riders (from 0.386 c/kW.h in December 2009 to 0.09 c/kW.h in July 2010. Effective July 1, 2011 a collection rider of 0.352 c/kW.h is in effect).

**Table 1: Rider F Adjustments 2005 to 2011**

| Date      | DFPV Account Balance | Variances During Forecast Period | Total Amounts | Rider F Rate |
|-----------|----------------------|----------------------------------|---------------|--------------|
| 01-Jun-11 | 283,517              | 1,142,583                        | 1,426,100     | 0.35         |
| 01-Jul-10 | -19,278              | -293,701                         | -312,979      | -0.09        |
| Jan-10    | -349,021             | -225,133                         | -574,154      | -0.35        |
| Dec-09    | -348,951             | -230,393                         | -579,344      | -0.39        |
| Mar-09    | -305,186             | 305,186                          | 0             | 0.00         |
| Aug-08    | 504,626              | 5,068,321                        | 5,572,947     | 1.86         |
| May-08    | 224,616              | 3,482,674                        | 3,707,290     | 1.23         |
| Dec-06    | 34,538               | 2,744,022                        | 2,778,560     | 0.96         |
| Mar-06    | 635,809              | 2,958,752                        | 3,594,561     | 1.28         |
| Jul-05    | 290,742              | 1,882,172                        | 2,172,914     | 0.79         |

**Note: For December 2009 and January 2010 the values indicated above are for 6 month forecasts.**

In the interest of long term rate stability, the objective of the Companies is to administer a Rider F rate which will be in effect for a year or longer while also keeping the Diesel Fuel Price Adjustment account within a defined range of +/- \$200,000. This requires the Companies to calculate a Rider F rate that will result in forecast collections equal to the current balance of the Diesel Fuel Price Accounts for both Companies, plus the net of the forecast diesel fuel price variances and RS 32 Secondary Sales Adjustments expected to be encountered during a forecast period to bring the DFPVA back to zero - typically within one year. Throughout the period reviewed, the DFPVA balance, as well as the forecast period price variance impact, have been calculated based on actual sales (for the balance and to date) and current forecasts of actual sales (for the forecast period price variance impact).

**Figure 1** illustrates the Rider F adjustments provided in Table 1. This figure sets out in blue the total actual YEC and YECL DFPVA balances at that time, and in red the forecast variances to be collected over the forecast period<sup>20</sup> (with the Rider F values set to address both the then-current actual balance (blue) plus the forecast variances (red)). The forecast totals to be collected over the forecast period tend to be the majority of the amounts to be collected through the rider, with YEC and YECL opening actual DFPVA balances forming a very small portion of the total to be collected. In practice the total DFPVA balances each year have not materially driven Rider F collections or any degree of rate instability; overall any instability in the Rider F charges have been driven by required collections forecast over the forecast period arising from uncontrollable fuel price variances, not deferred balances.

<sup>20</sup> In two cases the values are for 6 month forecasts for specific reasons relating to GRA timing.

**Figure 1: Rider F Adjustments 2005 to 2011**

