

B-70.



THE YUKON ELECTRICAL COMPANY LIMITED

An **ATCO** Company

RIDER D – DIESEL GENERATION ENERGY COST RECOVERY RIDER

1
2 Yukon Electrical Company Limited ("YECL") hereby submits an application to the Yukon
3 Utilities Board (Board), pursuant to the Public Utilities Act (Act), for an order approving
4 the implementation of a Diesel Generation Energy Cost Recovery Rider (Rider D) as
5 part of the joint Yukon Energy and Yukon Electrical 2009 Phase II Application filed on
6 February 19, 2010.

7 **1. Background**

8 In Yukon Electrical's 2008-2009 General Rate Application (GRA) dated April 30, 2008,
9 Yukon Electrical requested approval of a deferral account to deal with variances
10 between the actual and forecast cost of purchase power for the hydro zone during the
11 period when diesel generation is on the margin and when the approved run-out rate set
12 out under the Energy Reconciliation Adjustment (ERA) in Rate Schedule 42 is different
13 than the rates used to determine the forecast cost of purchase power for diesel
14 generation. The Board approved Yukon Electrical's proposed deferral account
15 treatment in Order 2009-2, dated February 12, from Yukon Electrical's 2008-2009
16 GRA¹. This deferral account is intended to recognize the differences between the
17 actual purchases of energy requirements when diesel is on the margin and the forecast
18 collection of costs from customers. This deferral account will ensure that increases or
19 decreases to the run-out rates will be flowed through to Yukon customers.

20 **2. Details of the new Rider D**

21 In Yukon Electrical's 2008-2009 GRA, the energy component of the purchase power
22 forecast was determined by applying Yukon Energy's wholesale rate to the total
23 forecast energy (kWh) purchases. Yukon Electrical's purchase power forecast was

¹ Yukon Electrical 2008-2009 General Rate Application, Section 3 – Purchase Power



THE YUKON ELECTRICAL COMPANY LIMITED

An **ATCO** Company

1 approved in Board Order 2009-2 from Yukon Electrical's 2008-2009 GRA and Board
2 Order 2009-5 from the subsequent Compliance Filing.

3 The cost of purchase power as set out in the approved forecast is based on the supply
4 to customers from existing Hydro generation sources. As a result, subsequent charges
5 to Yukon Electrical from Yukon Energy when the Energy Reconciliation Adjustment
6 (ERA) from Rate Schedule 42 is invoked is collected in the Board approved deferral
7 account relating to the increases or decreases to the cost of purchases power. This
8 deferral account will ensure that unforecasted diesel costs incurred by Yukon Energy
9 that is flowed through to Yukon Electrical via the ERA are flowed through to Yukon
10 customers.

11 Currently, Yukon Electrical does not have a Board approved Rider to facilitate the
12 dispensation of the balances tracked in the Board approved wholesale purchase power
13 deferral account. As a result, Yukon Electrical is requesting Board approval to allow
14 Yukon Electrical to invoke its proposed Rider D – Diesel Generation Energy Cost
15 Recover Rider as an adjustment that shall be applicable to all Yukon customers. Yukon
16 Electrical proposes to include the new Rider D as part of the Yukon rate schedules.
17 Yukon Electrical's proposed Rider D is intended to reflect the nature of Riders used in
18 other similar jurisdictions such as Northland Utilities (NWT) Limited Rider I – Diesel
19 Generation Rider. As a result, when Yukon Energy charges Yukon Electrical for
20 wholesale purchases per the ERA from Rate Schedule 42, Yukon Electrical proposes to
21 flow through these charges to Yukon customers (per Rate Schedule 42). Yukon
22 Electrical does not propose to apply Rider D to customers served on Rate Schedule 32
23 Secondary Energy and Rate Schedule 40 Maintenance Energy. It is important to note
24 that in the YEC/YECL joint 2009 Phase II Application, it is proposed that Rate Schedule
25 40 be discontinued.

26 At this time, subject to review of the monthly deferral account balance, Yukon Electrical
27 proposes that any reconciliation of Rider D will occur on an annual basis and applied as



THE YUKON ELECTRICAL COMPANY LIMITED

An **ATCO** Company

1 an adjustment to the monthly retail rates based on a ¢/kWh charge or refund. Currently,
2 Rider D is proposed to be set at 0.00 ¢/kWh, as shown in Attachment 1.

3 In order to facilitate the implementation of Rider D, Yukon Electrical also proposes to
4 amend the Energy Reconciliation Adjustment (ERA) provision set out in Rate Schedule
5 42 in order to clarify the manner in which Rate Schedule 42 is intended to operate with
6 the new Rider D. Yukon Electrical proposes to amend the ERA provision as follows
7 (with Word Revision tracking): Attachment 2 sets out Rate Schedule 42 reflecting the
8 proposed amendment.

9 Energy Reconciliation Adjustment per Rate Schedule 42

10 Charges to YECL will be periodically adjusted on a monthly basis to
11 reconcile actual wholesale purchases to test year forecast purchases
12 during the months when diesel generation is on the margin for the WAF
13 system. To the extent that actual wholesale purchases fall short or
14 exceed forecast wholesale purchases, an adjustment to the YECL bills will
15 be made at a rate equal to the Board approved ~~run-out~~ rate. ~~for~~
16 ~~non-government residential service for the Hydro zone~~. Such adjustment
17 for shortfalls in actual wholesale purchases will be limited to minus 10% of
18 the forecast wholesale purchases in any period.

19 Accordingly, Yukon Electrical is requesting approval to implement the new Rider D
20 Diesel Generation Energy Cost Recover Rider as a placeholder to flow through the
21 actual cost of purchase power for the hydro zone during the period when diesel
22 generation is on the margin that has not been forecasted, and amendments to the ERA
23 provision in Rate Schedule 42. All of which is respectfully submitted this 1st day of
24 March, 2010.

RIDER D

DIESEL GENERATION ENERGY COST RECOVERY 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 collect wholesale purchase costs incurred when diesel generation on the margin for the Hydro zone is greater or less than the forecast as billed from YEC per the Energy Reconciliation Adjustment set out under Rate 42.

An adjustment will be applied based on a 0.00¢ per kW.h charge or refund to all kWh consumed.

NOTE: This Rider will be reviewed and updated annually to dispense of deferral balances related to wholesale purchase costs incurred when diesel generation on the margin for the Hydro zone is greater or less than the forecast as billed from YEC.

Rider D does not apply to Rate Schedule 32 Secondary Energy and Rate Schedule 40 Maintenance Energy.

RATE SCHEDULE - 42

WHOLESALE PRIMARY

AVAILABLE:

To The Yukon Electrical Company Limited.

APPLICABLE:

For wholesale primary supply to The Yukon Electrical Company Limited.

RATE:

Energy Charge

All Energy consumed at:

per 2009 Phase II Application ¢ per kW.h

Energy Reconciliation Adjustment

Charges to YECL will be adjusted on a monthly basis to reconcile actual wholesale purchases to test year forecast purchases during the months when diesel generation is on the margin for the WAF system. To the extent that actual wholesale purchases fall short or exceed forecast wholesale purchases, an adjustment to the YECL bills will be made at a rate equal to the Board approved rate. Such adjustment for shortfalls in actual wholesale purchases will be limited to minus 10% of the forecast wholesale purchases in any period.

**ELECTRIC
SERVICE
REGULATIONS:**

The Company's Electric Service Regulations approved by the Yukon Utilities Board form part of this rate schedule and apply to the Company and every customer supplied with electric service by the Company in the Yukon and British Columbia. Copies of the Electric Service Regulations are available for inspection in the offices of the Company during normal working hours.



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

TABLE OF CONTENTS

- Section 1 Overview**
- Section 2 Sales and Revenue**
- Section 3 Purchase Power**
- Section 4 Diesel Fuel Costs**
- Section 5 Operations and Maintenance Expenses**
- Section 6 Taxes Other Than Income**
- Section 7 Depreciation**
- Section 8 Return on Rate Base**
- Section 9 Capital Additions**
- Section 10 Income Tax**
- Section 11 Interim Refundable Rate Riders**



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

1 **Section 1 – Overview**

2 This Phase I application deals with The Yukon Electrical Company Limited's ("Yukon
3 Electrical") requested approval of the revenue requirement detailed herein for the test
4 period 2008-2009.

5 This overview will discuss:

- 6 • Background
- 7 • Organization
- 8 • Summary of Application
 - 9 • Assumptions
 - 10 • Revenue Requirement
- 11 • Summary of Approvals being Requested
 - 12 • Revenue Requirement
 - 13 • Deferral Accounts
- 14 • Witnesses

15 **Background**

16 Yukon Electrical distributes electricity to the majority of Yukon residents. It has
17 approximately 15,000 customers throughout the Yukon and also serves several remote
18 communities through diesel generating plants.

19 Yukon Electrical has been providing electrical service to Yukoners for over a century.
20 Chartered in 1901, the pioneer company began generating electricity for the handful of
21 residents of Whitehorse using a wood-fired, horizontal piston steam engine. Since then,
22 Yukon Electrical has grown to serve more than 15,000 customers in 19 communities. A
23 private, investor-owned utility, Yukon Electrical is a member of the ATCO Group of
24 Companies. Its head office and service centre are in Whitehorse.



THE YUKON ELECTRICAL COMPANY LIMITED

An **ATCO** Company

1 Yukon Electrical purchases power from Yukon Energy and distributes it to customers in
2 the communities of Whitehorse, Marsh Lake, Tagish, Teslin, Haines Junction,
3 Carmacks, Carcross, Keno, Stewart Crossing and Ross River. Other Yukon Electrical
4 service areas include Canyon Creek, Deep Creek, Takhini River Crossing as well as a
5 variety of rural areas north, south and west of Whitehorse. It maintains back-up
6 generating plants in Carmacks, Teslin, Haines Junction, Ross River and Stewart
7 Crossing in the event of a power interruption.

8 The company generates and distributes its own power in Old Crow, Pelly Crossing,
9 Beaver Creek, Destruction Bay, Burwash, Upper Liard, Lower Post, Watson Lake and
10 Swift River. Yukon Electrical has customer service offices in Whitehorse and Watson
11 Lake and plant operators in nine communities. Yukon Electrical also owns and
12 operates the Fish Lake Hydro plant, on the outskirts of Whitehorse. Built in 1950, the
13 Fish Lake plant remains a steady contributor of power to the Whitehorse-Aishihik-Faro
14 (WAF) grid.

15 Although Yukon Electrical has not been before the Yukon Utilities Board with a General
16 Rate Application since the test years 1996-1997, Yukon Electrical has continued to
17 provide safe reliable and cost effective service to our customers. However there have
18 been significant cost pressures in recent years that require Yukon Electrical to come
19 forward to the Board to ensure that it is possible to continue to deliver the same high
20 standard of service to customers at fair and reasonable rates.

21 **Organization**

22 Yukon Electrical is a wholly owned subsidiary of ATCO Electric Ltd and is a proud
23 member of the ATCO group of companies.



THE YUKON ELECTRICAL COMPANY LIMITED

An **ATCO** Company

1 Summary of Application

<u>Assumptions Used</u>	<u>2008</u>	<u>2009</u>
Collective Agreement Staff (In-Scope) Labour Escalations (excluding increments)	4%	9.5%
Outside Collective Agreement Staff (Out-of-Scope) Labour Escalations	5%	7.5%
Other Inflation	5.0%	5.0%
Long Term Debt	6.60%	6.60%

2 Revenue Requirement

3 The revenue requirement during the test period is \$46,660,000 in 2008 and
4 \$47,902,000 in 2009.

5 This revenue requirement represents an increase over the amount that would be
6 recovered under existing rates and riders of \$2,220,000 in 2008 and \$4,130,000 in
7 2009. This represents a 5.9% increase in 2008 and a 5.1% increase in 2009. These
8 increases do not include fuel price increases as shown in Section 4 of the application.

9 The components of revenue requirement are outlined in Schedule 1.1 and are
10 discussed in Sections 1 through 10 of this application. Significant items of note are the
11 updating of fuel rates from 1997 levels outlined in Section 4, the labour and fringe
12 escalations as described in Section 5 and the amortization of deferred costs described
13 in Section 8. Also included in Section 8 is expert testimony from Foster Associates, Inc.
14 ("Foster") on a fair return comprised of both an appropriate capital structure and a return
15 on equity for the test period 2008-2009. Yukon Electrical has chosen to engage Foster
16 and Associates, Inc. given the extended period since these matters were examined in
17 detail by the Board and the nature of the changes requested. In this application, Yukon
18 Electrical has incorporated a 9.25% rate of return on a common equity ratio of 47.5% by
19 the end of 2008.



THE YUKON ELECTRICAL COMPANY LIMITED

An **ATCO** Company

1 **Summary of Approvals Being Requested**

2 Yukon Electrical is seeking approval of the following for the 2008-2009 test period:

3 **Revenue Requirement**

4 The revenue requirement Yukon Electrical is seeking approval for is \$46,660,000 for
5 2008 and \$47,902,000 for 2009.

6 **Deferral Accounts**

7 Yukon Electrical is seeking approval to continue utilizing the following deferral accounts:

8 Purchased Power Flow Through

9 A Purchased Power deferral account is being requested to flow through increases or
10 decreases to the rates being charged by Yukon Energy that are incorporated in this
11 application. The details of this deferral account are discussed in Section 3.

12 Fuel Price Flow Through

13 Yukon Electrical will continue to recover variances in diesel costs through Rider F. The
14 variances in the diesel costs will be the variance from the forecast diesel costs in the
15 test period as outlined in Schedule 4.2. These costs are the forecasts for the test period
16 using the best information available at this time and are updated from the forecasts
17 used as the basis for the rider that is currently in place. The rider currently captures
18 variances from the forecast 1997 fuel prices.

19 Diesel Contingency Fund

20 Given that diesel may be on the margin during certain months in the test period, the
21 continuation of the diesel contingency fund as approved during the 1996/1997 GRA
22 should be continued. The details of this deferral are outlined in Section 3.



THE YUKON ELECTRICAL COMPANY LIMITED

An **ATCO** Company

1 Yukon Electrical is seeking approval to utilize the following new deferral accounts:

2 Increased Fuel Costs Associated with Pelly Crossing

3 Yukon Electrical's forecast generation in the test period assumes the connection of
4 Pelly Crossing to the WAF grid effective November 1, 2008. As the timing of
5 commencement of this service is uncertain and the costs associated with this
6 assumption are material, Yukon Electrical is seeking a deferral account for the
7 incremental costs associated with any changes that result from reliance on the current
8 assumption. The details of this deferral account are outlined in Section 4.

9 Income Tax Rate Variance Deferral Account

10 The income tax rates used by Yukon Electrical in preparing the forecast income tax
11 expense for the test period are detailed on Page 10-1. As there is potential for certain
12 income tax rates to change, Yukon Electrical is seeking approval for a deferral account
13 for the rates detailed on Page 10-2. The details of this deferral account are discussed
14 in Section 10.

15 The above noted ongoing and new deferral accounts meet the typical criteria for the
16 establishment of a deferral account and are required as the costs related to these
17 deferral accounts are:

- 18 1) Not under the control of the company and are not reasonably forecastable;
19 or
20 2) An error in forecasting could produce a loss or gain of a substantial magnitude.

21 **Phase II and Interim Rate Riders**

22 Yukon Electrical and The Yukon Energy Corporation ("Yukon Energy") have had
23 preliminary discussions regarding the development and filing of a joint Phase II GRA



THE YUKON ELECTRICAL COMPANY LIMITED

An **ATCO** Company

1 that would include a Cost of Service Study, Rate Design, Rate Schedules and Terms
2 and Conditions based on Yukon Electrical's and Yukon Energy's combined 2009
3 revenue requirement and sales forecast. It is expected this joint Phase II GRA would be
4 filed within three months of Yukon Energy filing its Phase I GRA.

5 During the intervening period, Yukon Electrical is proposing to implement riders that will
6 be applied to existing primary base rates to recover the difference between forecast
7 revenues at existing rates and riders, as of December 2007, and the forecast 2008
8 revenue requirement. This proposal is similar to the approach previously approved by
9 the Board for YEC's Rider J.

10 To minimize the rate impact to customers, Yukon Electrical is hereby applying for an
11 Interim Refundable Rate Rider, Rider R, and a Temporary Refund / Surcharge Rider,
12 Rider G, commencing July 1, 2008. These riders would be applied to all Yukon
13 Electrical and Yukon Energy retail customer bills, excluding Secondary Energy Rate 32
14 and Industrial Primary Rate 39, to collect the revenue shortfall on an interim refundable
15 basis. The details of these riders are discussed in Section 11.

16 **Summary of Placeholders**

17 As outlined in Page 5-4, affiliate charges associated with ATCO I-Tek and ATCO I-Tek
18 Business Services costs are currently being reviewed as part of a benchmarking
19 process before the Alberta Utilities Commission ("AUC"). Yukon Electrical proposes
20 these costs as placeholders and will update these for the impact of the benchmark
21 report when the appropriate approvals have been finalized and approved by the AUC.

22 **Witnesses**

23 Yukon Electrical has not yet finalized its position regarding the specific witnesses who
24 will be brought forward to speak to various aspects of this application. This decision will
25 be influenced to some degree by the areas in which the Board and Interveners show the



THE YUKON ELECTRICAL COMPANY LIMITED

An **ATCO** Company

- 1 most interest. Yukon Electrical will provide a list of its witnesses to the Board as soon
- 2 as the final decision has been made.



THE YUKON ELECTRICAL COMPANY LIMITED

An **ATCO** Company

1 Section 3 – Purchase Power

2 Overview

3 The purchase power included in this application is outlined in Schedule 3.1 and is:

	2006 Actual	2007 Actual	Test Period 2008 2009	
	(\$000)			
Primary Purchase Power	17,227	17,436	17,790	18,003
Secondary Purchase Power	1,130	1,194	1,028	424
Shortfall Rider J	4,882	5,017	5,028	5,067
Total Purchased Power	23,239	23,647	23,846	23,494

4 The purchased power costs are forecast to remain flat over the test period.

5 Background

6 Approximately 90% of the supply required by Yukon Electrical is purchased from Yukon
7 Energy. This percentage is consistent for each of the years during the test period. The
8 purchases are for Yukon Electrical's customers on the Whitehorse-Aishihik-Faro (WAF)
9 Grid as well as Yukon Electrical customers that are on the Mayo-Dawson Grid.

10 The amounts for the Shortfall Rider J relate to Yukon Energy's Shortfall Rider J and are
11 a flow through for Yukon Electrical. That is, these amounts are fully collected from
12 Yukon Electrical's customers (refer to Schedule 2.1).

13 The Fish Lake hydro generation in the test period outlined in Schedule 3.2, is based on
14 the average generation over the last 10 years at Fish Lake adjusted for estimated
15 downtime in the test period, for required rebuilds.



THE YUKON ELECTRICAL COMPANY LIMITED

An **ATCO** Company

1 **Deferral Account**

2 (a) Rate from Yukon Energy

3 The cost of purchased power in this application is based on Yukon Energy's
4 rates that are currently in place for primary energy and secondary sales and are
5 outlined on Schedule 3.1, lines 6 and 7. These rates do not include any
6 adjustment to the rates equal to the approved run out rate for non-governmental
7 residential service for the hydro zone. Subsequent increases or decreases to
8 these rates for 2008 and thereafter will be flowed through to Yukon Electrical's
9 customers.

10 (b) Diesel Contingency Fund

11 Given that WAF diesel may be on the margin during certain months in the test
12 period, Yukon Electrical requests the continuation of the diesel contingency fund
13 mechanism as approved during the 1996/1997 GRA. For purposes of this filing,
14 Yukon Electrical has updated its annual forecast of hydro generation to 6.2
15 GW.h.

16 **Forecast Process**

17 The energy component of the purchase power cost is determined by applying Yukon
18 Energy's wholesale rate to the total forecast energy (KWh) purchases. Total forecast
19 purchases are determined by applying an estimated line loss percentage to Yukon
20 Electrical's sales load forecast that is discussed in Section 2. Overall line losses are
21 determined based on using a five year historical average of 6.2%.

Yukon Electrical Company Limited
2008 - 2009 General Rate Application
Schedule of Purchase Power

Schedule 3.1

Line No.	Description	Cross Ref.	Actual 2006	Actual 2007	Test Period 2008	Test Period 2009
1	Purchases (MWh)					
2	Primary Energy		251,861	254,914	260,093	263,202
3	Secondary Sales		21,555	23,566	16,853	6,954
4			273,416	278,480	276,946	270,156
5	Purchase Power Rates	S.3.2 L.10				
6	Primary Energy Charge (\$ per KWh)		0.0684	0.0684	0.0684	0.0684
7	Secondary Sales (\$ per KWh)		0.0524	0.0507	0.061	0.061
8	Shortfall Rider J		14.93%	14.93%	14.93%	14.93%
9	Purchase Power Expense (\$000s)					
10	Primary Energy Expense	L.2 x L.6	17,227	17,436	17,790	18,003
11	Secondary Energy Expense	L.3 x L.7	1,130	1,194	1,028	424
12	Shortfall Rider J	S.2.1 L.44	4,882	5,017	5,028	5,067
13	Total Purchase Power Expense	S.1.1 L.7	23,239	23,647	23,846	23,494

Schedule 3.2

Yukon Electrical Company Limited
 2008 - 2009 General Rate Application
 Schedule of Energy Losses
 (MW.h)

Line No.	Description	Gross Ref.	Actual 2006	Actual 2007	Test Period 2008	Test Period 2009
1	Sales and Losses					
2	Total energy sales (MWh)	S.2.1 L.39	285,205	291,752	287,255	279,497
3	Losses and company used - (MWh)		18,591	18,087	17,810	17,329
4	Losses -%		6.5%	6.2%	6.2%	6.2%
5	Total generation and purchases (MWh)		<u>303,796</u>	<u>309,839</u>	<u>305,065</u>	<u>296,826</u>
6	Sources - MWh					
7	Hydro generation		8,216	9,025	6,192	6,192
8	Hydro grid standby diesel generation	S.4.1 L.1	39	131	44	44
9	Diesel generation	S.4.1 L.1	22,125	22,203	21,883	20,433
10	Purchases	S.3.1 L.4	273,416	278,480	276,946	270,156
11			<u>303,796</u>	<u>309,839</u>	<u>305,065</u>	<u>296,826</u>
12	Sources - %					
13	Hydro generation		2.7%	2.9%	2.0%	2.1%
14	Diesel generation		7.3%	7.2%	7.2%	6.9%
15	Purchases		90.0%	89.9%	90.8%	91.0%
			<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

13



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

2008-2009 General Rate Application
The Yukon Public Utilities Board
Information Request No. 1
Dated: July 16, 2008
YUB-YECL-6
Page 1 of 3

YUB-YECL-6

Reference: Deferral Account; Application, page 3-2

Quote: These rates do not include any adjustment to the rates equal to the approved run out rate for non-governmental residential service for the hydro zone.

...

Overall line losses are determined based on a five year historical average of 6.2%.

Preamble: The Board wishes further information.

Request:

- (a) Please provide a detailed explanation and example as to what is meant by the above quote, in particular the part of the phrase that refers to "run out rate".
- (b) Please provide a detailed explanation and a spreadsheet analysis complete with formulae and linkages that illustrate the determination of the five-year historical average of 6.2% line loss percentage shown on page 3-2.
- (c) Please provide explanation and a spreadsheet analysis complete with formulae and linkages that determines the line loss percentages for each of the five years that make up the five-year historical average referred to in the above quote.

Response:

- (a) Yukon Electrical's Application incorporates a forecast purchased power rate of 6.84 cents per kWh for power purchased from Yukon Energy as per the currently approved Wholesale Power Rate Schedule 42. The purchased power expense also reflects a flow through of Rider J collections through to Yukon Energy. Please refer to YUB-YECL-6(a) Attachment 1 for a copy of Rate Schedule 42 that details the 6.84 cents per kWh as well as a description of the Energy Reconciliation Adjustment.



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

2008-2009 General Rate Application
The Yukon Public Utilities Board
Information Request No. 1
Dated: July 16, 2008
YUB-YECL-6
Page 2 of 3

The Energy Reconciliation Adjustment (ERA) refers to the wholesale rate charged from Yukon Energy to Yukon Electrical being periodically adjusted to reconcile actual wholesale purchases to test year forecast purchases. To the extent that actual wholesale purchases fall short or exceed forecast wholesale purchases, an adjustment to the Yukon Electrical bills will be made at a rate equal to the approved run out rate for non-government residential service for the Hydro zone. This rate has been set at 10.45 cents per kWh since the 1996/1997 GRA. Such adjustment for shortfalls in actual wholesale purchases will be limited to minus 10% of the forecast wholesale purchases in any period. In 1999, it was clarified the ERA mechanism would apply only during months when diesel was on the margin for the WAF system.

It is important to note the design of Rate Schedule 42 was done at a time when Yukon Electrical and Yukon Energy were jointly preparing and simultaneously filing their phase I and phase II applications. Diesel was also on the margin due to Yukon Energy's industrial sales to the Faro mine. Neither one of these two important factors is applicable for the 2008-2009 test period.

Yukon Electrical does not know whether diesel will be on the margin for the WAF system during the test period. Yukon Electrical also does not know whether Yukon Energy will interpret the currently worded rate Schedule 42 in a way that would result in the Yukon Energy charging or crediting Yukon Electrical 10.45 cents per kWh for actual wholesale purchases that fall short or exceed forecast wholesale purchases. Yukon Electrical anticipates these matters will be addressed as part of Yukon Energy's pending phase I and phase II applications. In the meantime, Yukon Electrical is requesting the continuation of a deferral account to flow through increases or decreases to purchased power rates.

- (b) Please refer to the YUB-YECL-06(a) Attachment 1. The average calculation of 6.2% is shown. Please note that there was a keying error on Schedule 3.2 Line 7 for 2005 Hydro generation.
- (c) Please refer to the YUB-YECL-06(a) Attachment 1. The line losses are calculated based upon the difference between actual sales and the total power generated and purchased. The purchased power and generated power are measured at source, before distribution. The amount of sales includes an estimate of unbilled usage at month end. Since electricity cannot be stored the

**IN THE MATTER OF the *Public Utilities Act*
Revised Statutes of Yukon, 2002, c. 186, as amended**

and

**An Application by Yukon Electrical Company Limited
For Approval of Revenue Requirements for 2008 and 2009**

REASONS FOR DECISION

APPENDIX A TO BOARD ORDER 2009-2

regression analyses are used, how many variables account for the variability, what value of R² is valid, what are other relevant statistics?

3 PURCHASE POWER

Purchase power costs included in the Application were expected to remain relatively flat for the test period:

Description ¹²	Actuals (\$000)		Test Period (\$000)	
	2006	2007	2008	2009
Primary Purchase Power	17,227	17,436	17,790	18,003
Secondary Purchase Power	1,130	1,194	1,028	424
Shortfall Rider J	4,882	5,017	5,028	5,067
Total Purchased Power	23,239	23,647	23,846	23,494

Approximately 90% of the power supply required by YECL is purchased from YEC. The purchases are for YECL's customers on the Whitehorse-Aishihik-Faro (WAF) and Mayo-Dawson (MD) grids. The amounts included in the Shortfall Rider J are related to YEC's Shortfall Rider J and are a flow-through for YECL.

YECL requested approval of two deferral accounts. The first deferral account is related to increases or decreases to the cost of purchased power, which was based on YEC's rates that were in place for primary energy and secondary sales¹³. YECL indicated that subsequent increases or decreases to these rates would be flowed through to YECL's customers. YECL also requested the continuation of the Diesel Contingency Fund (DCF) mechanism as approved in the 1996-97 GRA.

In its Application, YECL stated that Fish Lake hydro generation throughout the test period was based on the average generation over the last 10 years and adjusted for estimated downtime in the test period for required rebuilds. Intervenors took issue with the basis of YECL's Fish Lake hydro generation forecasts as well as the expensing of purchase power costs associated with the Fish Lake hydro rebuilds.

In its argument, YEC indicated that the DCF as established in the 1996-97 GRA settlement (Ex.C1-11, Tab 5) directed that "Rates and the fund will be determined using the long-term average water expected to be available for generation". YEC pointed out that the forecast Fish Lake generation (6.8 GW.h) at Fish Lake throughout the 2008 and 2009 test period was 3.8 GW.h below that which was forecast in the 1996-97 GRA and compared with 2007, the Application forecasts a reduction 2.8 GW.h in each test year.

YEC recommended that the Board direct YECL to adjust its Application so that Fish Lake hydro generation reflects the Fish Lake hydro long-term average water expected to be available for generation. YEC further recommended that the long-term average be

¹² YECL 2008-2009 General Rate Application, page 3-1

¹³ YECL 2008-2009 GRA Application; Schedule 3.1, lines 6 and 7

based on all years of available data and not, as was done in the Application,¹⁴ based on the last 10 years on record.

Contrary to YEC's argument, LE submitted that YECL should use a Fish Lake generation forecast that reflects recent practice, 6.962 GW.h per year, and that any generation below this actually experienced due to the required rebuilds should be clearly documented.

LE and YEC agreed and submitted in argument that YECL should be required to capitalize the purchase power required because of the Fish Lake Hydro rebuild. This would better reflect all relevant capital costs associated with the hydro rebuild and would avoid artificially raising test-year rates to recover added purchase power related to the Fish Lake Hydro rebuild.

In its reply argument, YECL indicated that relying on a 10-year average, adjusted for the planned rebuilds, was a reasonable approach considering the forecast output was higher than actual output in six of the last 10 years. Accordingly, YECL submitted that the forecast of purchase power, including the amount of generation from Fish Lake, was reasonable and appropriate for the test years and should be approved by the Board, as filed. With respect to the capitalization of purchase power costs associated with the Fish Lake rebuilds, YECL in its reply argument, submitted that it had followed a standard methodology in determining that these costs should be expensed and this approach should be approved by the Board.

Since there was little debate concerning the deferral accounts, YECL in its reply submitted that these deferral accounts should also be approved as requested.

Views of the Board

The Board acknowledges that enduring benefits will be provided to the facility and ratepayers as a result of the Fish Lake hydro rebuild. Further, the Board notes the capital costs associated with the rebuild are to be amortized over time due to the enduring benefits. The Board considered the YECL witness response that the incremental purchase costs from WAF related to the rebuild could be capitalized.¹⁵ Therefore, the Board finds it reasonable to amortize the increased power purchase costs directly related to the rebuild project over time.

Further, the Board notes LE's argument that indicated that incremental power purchases incurred because of the required rebuilds should be clearly documented. The Board agrees that this is a reasonable approach. Therefore, the Board directs YECL in its refiling to capitalize the forecast purchased power costs associated with the Fish Lake rebuild and to not treat these costs as an expense item in the test years. The Board further directs YECL at the time of its next GRA to provide clear documentation of these incremental power purchases from WAF due to the Fish Lake hydro rebuild.

¹⁴ The record that shows the basis for calculating the 10.042 GWh/yr average adopted in the 1996/97 GRA as well as the adjusted average when including the additional years of record now available; YEC Argument, page 13

¹⁵ Transcript; pages 275 - 276

The Board acknowledges that there was little debate regarding the deferral accounts described in the Application, i.e. the Diesel Contingency Fund and Rate from YEC¹⁶. Therefore, the Board approves YECL's request for continuation of the aforementioned deferral accounts (see Footnote 16).

The Board is concerned with the YECL's proposed Fish Lake hydro generation forecast of 6.2 GW.h for each of the test years, which is a 3.8-GW.h reduction from the 10 GW.h of generation proposed in YECL's last GRA. The Board notes that YECL's statement that the 10-year average for Fish Lake generation of 7 GW.h is higher than the actual output in six of the last 10 years¹⁷. However, the Board notes that the average generation for the years when output exceeded the 7 GW.h, the average generation for the four years was almost 9 GW.h.

In making a determination on this issue, the Board considered YECL's submission in argument that it is in a new water-licence period and is subject to certain restrictions. Further, the Board accepts YEC's suggestion that the available generation at the Fish Lake hydro plant should be based on all years of available data. Accordingly, the Board finds 8.73 GW.h¹⁸ is reasonable as the base generation for the Fish Lake hydro facility, prior to considering the impact of any downtime due to the Fish Lake hydro rebuilds. Therefore, the Board directs YECL in its refilling to reflect base hydro generation of 8.73 GW.h.

4 DIESEL FUEL COSTS

The following table¹⁹ shows total diesel fuel costs included in the Application:

	Actuals (\$000)		Test Period (\$000)	
	2006	2007	2008	2009
Diesel Fuel Costs	2,026	2,054	5,715	5,299

The forecast diesel fuel cost increase of \$3.6 million in 2008 is mainly due to the inclusion of the Rider F fuel rider in base rates for the test period.²⁰ The forecast diesel fuel cost decrease of approximately \$0.4 million in 2009 is due to reduced diesel generation in Pelly Crossing because of its interconnection to the WAF grid. YECL is seeking continuation of Rider F as well as a deferral account for the incremental costs associated with a change to the assumption that Pelly Crossing's connection to the WAF grid would be effective November 1, 2008.²¹

In its argument, LE pointed out that YECL has not proposed conservation or efficiency programs in its diesel communities despite incurring diesel fuel costs greater than \$5 million in 2006 and 2007. In light of the high diesel fuel costs, LE and YEC submitted

¹⁶ GRA Application; page 3-2

¹⁷ YUB-YECL-05 Attachment 1.xls

¹⁸

¹⁹ YECL 2008-2009 General Rate Application, page 4-1

²⁰ Prior to 2008, YECL recovered the difference between the forecast 1997 fuel rates and the current fuel rate using Rider F.

²¹ Pelly Crossing deferral account basis shown in the Application, page 4-3

YUKON
ENERGY



YUKON ENERGY CORPORATION

&



THE YUKON ELECTRICAL COMPANY LIMITED

1993 / 94 GENERAL RATE APPLICATION

VOLUME I

MARCH 1993

- (c) a viable alternative fuel source is available, capable of providing the same quantity of space or process heating in the event of electric power interruptions of unlimited duration.

Secondary energy rates are set at two-thirds of the forecast equivalent cost of heat energy derived from fuel oil in order to encourage sales when surplus hydro is available. These rates will be offered to qualified customers who will be notified by YEC or YECL whenever secondary energy is available for periods in excess of one month, based on the availability of surplus hydro.

Wholesale Rate

The wholesale rate applicable to transfers between YEC and YECL has been restructured to provide a more stable balance of costs and revenues between the two companies.

The move to increase retail run-out rates to incremental energy costs has also increased revenue volatility of YEC and YECL. As YEC is responsible for most energy production and YECL is responsible for most retail sales, fluctuations of retail sales now cause revenue changes at an incremental cost level for YECL that is not balanced by a corresponding cost change in the current single block wholesale energy rate. The converse problem occurs for YEC. Restructuring the wholesale rate to allow periodic adjustments between forecast and actual wholesale transfers at a rate equal to the retail run out rate restores the balance. The new wholesale rate will cause adjustments in transfers between YECL and YEC that balance the changes in revenues and costs caused by sales fluctuations and will have no effect on retail rates.

RATE SCHEDULE - 42

WHOLESALE PRIMARY

AVAILABLE: To The Yukon Electrical Company Limited.

APPLICABLE: For wholesale primary supply to The Yukon Electrical Company Limited.

RATE: Energy Charge

All Energy consumed at 7.502¢ per kW.h

Energy Reconciliation Adjustment

Charges to YECL will be periodically adjusted to reconcile actual wholesale purchases to test year forecast purchases. To the extent that actual wholesale purchases fall short or exceed forecast wholesale purchases, an adjustment to the YECL bills will be made at a rate equal to the approved run out rate for non-government residential service for the Hydro zone. Such adjustment for shortfalls in actual wholesale purchases will be limited to minus 10% of the forecast wholesale purchases in any period.

**ELECTRIC
SERVICE
REGULATIONS:**

The Company's Electric Service Regulations approved by the Yukon Utilities Board form part of this rate schedule and apply to the Company and every customer supplied with electric service by the Company in the Yukon and British Columbia. Copies of the Electric Service Regulations are available for inspection in the offices of the Company during normal working hours.

1 **YECL Panel 1 cross-examined by Ms. Bentivegna**

2 Q MS. BENTIVEGNA: Thank you, Madam Chair. Good afternoon, panel.

3 If you can first go to your Application, page 2-1, lines 11 to 14. It is regarding the
4 secondary sales forecast of YEC. Just let me know when you are there.

5 A MR. GRATTAN: I am.

6 Q MS. BENTIVEGNA: I'll just read the lines I was referring to: "Total primary
7 sales are forecast to increase 0.8% in each of 2008 and 2009. Secondary sales are forecast
8 to decrease by 28.5% in 2008 and 58.7% in 2009 as Yukon Energy is forecasting a
9 decrease in surplus hydro and as a result has significantly reduced its forecast of
10 secondary sales." My question to you is: is the YEC secondary sales forecast on the
11 public record?

12 A MR. GRATTAN: The information provided as part of the Application that details
13 the two forecast figures for each the 2008 and 2009 came from Yukon Energy, so I guess
14 I would have to say yes.

15 Q MS. BENTIVEGNA: You mean, yes, in that they are in the Application and they
16 provided them to you but other than that there is nothing —

17 A MR. GRATTAN: Sorry. Fair enough. Yes.

18 Q MS. BENTIVEGNA: All right.

19 Now, still on the sales forecast, not the secondary sales forecast, but just sales forecast
20 in general. Does weather affect your sales forecast?

21 A MR. GRATTAN: Yes.

22 Q MS. BENTIVEGNA: And, is the weather — I assume it is not under YECL's
23 control.

24 A MR. GRATTAN: As —

25 Q MS. BENTIVEGNA: Just asking.

26 A MR. GRATTAN: No, it's not Yukon Electrical's control. The original question
27 that you just asked me with regards to weather impacting Yukon Electrical's sales
28 forecast and I said, "Yes." If I may just comment on that.

29 MS. BENTIVEGNA: Go ahead.

1 A MR. GRATTAN: The sales forecast is based on a weather normalized regression
2 for a large number of our customers: 20 years in the Whitehorse area, 12 years in the
3 Watson Lake area. The impact of weather on a go-forward basis, the actuals, is what
4 really results either in your actuals being higher or lower than forecast given the normal
5 approach taken to forecasting.

6 MS. BENTIVEGNA: Thank you.

7 Q Would YECL like a deferral account for the sales forecast to mitigate the risk?

8 A MR. FREEDMAN: I would go to our criterion on page 1-5 of the Application,
9 and what we see is, for the first one, is that it's not under the control of the company and
10 not reasonably forecastable. What we would say with the sales forecast and the regression
11 analysis is that it's reasonably forecastable, so that would be where Yukon Electrical
12 would not be coming forth and seeking a deferral account for the sales.

13 Q MS. BENTIVEGNA: And do you use both criteria, then, when determining
14 whether to ask for a deferral account, or do you use one or the other?

15 A MR. FREEDMAN: Well, there are two criterion, but the first criteria was not
16 under the control of the company and/or not reasonably forecastable. The second criterion
17 is "or" and that was an error in forecasting could produce a loss or gain of substantial
18 magnitude. But the first criteria was "and" so you'd have to meet both "not under our
19 control" and "not reasonably forecastable".

20 Q MS. BENTIVEGNA: Okay, thank you. Now moving on to the shortfall Rider J
21 on your Application page 3-1, lines 10 to 12, which reads, "The amounts for the Shortfall
22 Rider J relate to Yukon Energy's Shortfall Rider J and are a flow through for Yukon
23 Electrical. That is, these amounts are fully collected from Yukon Electrical's customers
24 ..." and it refers to Schedule 2.1.

25 Is the source for this forecast Yukon Energy?

26 A MR. GRATTAN: No.

27 Q MS. BENTIVEGNA: Then if you can provide what the source of the forecast is,
28 and you can do it in an undertaking, if need be.

29 A MR. GRATTAN: I'll try to answer it. The source of the forecast is based on
30 Yukon Electrical's forecast sales, the base rates that are currently in effect, multiplied by

1 14.93%, which is the Rider J rate. So it's a — the amount shown on page 3-1, \$5,028,000
2 and \$5,067,000, is simply Yukon Electrical's forecasted base rate sales times 14.93%.
3 That's the source of the forecast.

4 Q MS. BENTIVEGNA: I see. Thank you. Now, the next topic is vacancy rate. So if
5 I can refer you to YUB-YECL-8(d) and (e).

6 A MR. GRATTAN: I got that.

7 Q MS. BENTIVEGNA: Now, before I get on with the questions, I just didn't want
8 to repeat the information you are already providing with regard to the undertaking to Mr.
9 Landry — I was wondering what the status of that was.

10 A MR. BABYN: We haven't yet completed it, but we plan to file it shortly.

11 Q MS. BENTIVEGNA: Okay, thank you. Now, you state in that IR that, "Vacancy
12 rates are calculated based on an approved complement for FTEs." And I think you've
13 said this a number of times during this hearing. As such vacancy rates are not — and then
14 you continue to state: "As such vacancy rates are not applicable given that there were no
15 Board approved FTEs for this period." My question is: when you look at the answer in
16 the (e)-part of the IR, there are references to two vacant journeyman lineman positions.
17 How long have these positions been vacant?

18 A MR. BABYN: To answer your question, right now we have one vacant
19 journeyman lineman position. So one was filled in August, and we're still seeking the
20 second one.

21 Q MS. BENTIVEGNA: Okay, and when you prepared your Application, how long
22 had the positions been vacant?

23 A MR. BABYN: They've been vacant since we filed our Application.

24 Q MS. BENTIVEGNA: What I meant was — before that. Had it been six months, a
25 year?

26 A MR. BABYN: I guess there was one vacancy in 2007, and then 2008 was an add,
27 if that helps.

28 Q MS. BENTIVEGNA: Okay, thank you. Now, can you undertake to provide a list
29 of all of the vacant positions and the duration of each vacancy for the years 2006 to now

YUKON UTILITIES BOARD

P.O. Box 6070, 19 - 1114 First Avenue,

Whitehorse, Yukon Y1A 5L7

Telephone (403) 667-5058, Fax (403) 667-5059

Our file no.: 3011

Your file no.:

November 5, 1999

R. McWilliam
Yukon Energy Corporation
P.O. Box 5920
Whitehorse, Yukon
Y1A 5L7

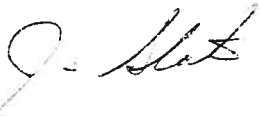
J. Carroll
Yukon Electrical Co. Ltd.
P.O. Box 4190
Whitehorse, Yukon
Y1A 3T4

Dear Sirs:

Re: Board Order 1999 - 4

I enclose a copy of Board Order 1999-4 accepting the utilities' agreement on Rate Schedule 42

Yours truly,



Jim Slater
Board Secretary

Enclosure

cc L. Bagnell Association of Yukon Communities
J. McLaughlin AYC Energy Committee
G. Everitt Town of the City of Dawson City
R. Clarkson New Era Engineering Corp.
R. Rondeau Utilities Consumers' Group
B. Newell City of Whitehorse
P. Percival
F. Roberts
P McMahon YTG Dept. of Economic Development

1999 NOV 10 AM 9:36

YUKON UTILITIES BOARD

ORDER 1999 - 4

October 27, 1999

RE:

THE YUKON ENERGY CORPORATION

and

THE YUKON ELECTRICAL COMPANY LIMITED

RATES SCHEDULE 42 SETTLEMENT

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
Rate Schedule 42 Settlement

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

ORDER 1999-4

WHEREAS:

- A. Yukon Energy Corporation's April 28, 1998 Revised Application requested that certain amendments be approved with respect to the wholesale rate applicable during 1996 and 1997.
- B. As this matter directly affects amounts paid to Yukon Energy Corporation and The Yukon Electrical Company Limited pursuant to Rate Schedule 42 (Wholesale Primary) for 1996 and 1997, and does not affect other ratepayers, Board Order 1998-5 agreed that the matter should be dealt with in a separate process after the public hearing.
- C. By letter of February 5, 1999 the Board agreed that the outstanding issues be resolved between the Companies utilizing the British Columbia Utilities Commission negotiated settlement process guidelines.
- D. Having reached a settlement, on October 7, 1999 the Companies requested that the Energy Charge Rate under Wholesale Rate Schedule 42 be approved at the amounts reflected in the Revised Application, being:
 - 1996 - 6.755 cents/kW.h
 - 1997 - 6.840 cents/kW.h
- E. The Companies provided a copy of the Settlement Agreement, clarifying certain items in the Energy Reconciliation Adjustment mechanism in Rate Schedule 42.
- F. The Board has reviewed the Settlement Agreement and has determined that no changes to the wording of Rate Schedule 42 are required but that the clarifications are consistent with the intent of Rate Schedule 42.

NOW THEREFORE the Board orders that:

1. Energy Charge Rate under Wholesale Rate Schedule 42 is approved as follows:

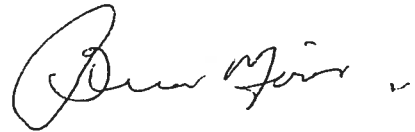
1996 – 6.755 cents/kW.h

1997 – 6.840 cents/kW.h

2. The terms of the Settlement Agreement (Appendix A) are approved.

Dated at the City of Whitehorse, in the Yukon Territory, this 5th day of November 1999.

BY ORDER



Brian Morris
Chair

Settlement Agreement and Mutual Release Concerning Outstanding Rate Schedule 42 Issues

This record of settlement and mutual release dated July 15, 1999 records the settlement reached between Yukon Energy Corporation ("Yukon Energy") and The Yukon Electrical Company Limited ("Yukon Electrical") concerning outstanding Rate Schedule 42 issues. This document is to be presented to the Yukon Utilities Board ("Board") for action pursuant to the process suggested by the Board's letter of February 5, 1999. This agreement is binding on both parties and represents a package proposal with no issue capable of being severed.

Summary of Outstanding Rate Schedule 42 Issues

Energy Reconciliation Adjustment (ERA) + 10% Issue: Yukon Energy had requested confirmation that the ERA applies without limit to all actual wholesale purchases that exceed forecast wholesale purchases without reference to a +10% limit. Yukon Electrical claimed there was agreement to a +10% limit. The +10% mechanism had been considered by the companies as an approach to address risks of both utilities. The +10% mechanism was included in the original March 17, 1993 filing. It was deleted from the final October 7, 1993 filing. The parties are in dispute as to whether or not there was an agreement dealing with the October 7, 1993 deletion.

ERA Diesel on the Margin Issue: Yukon Energy requested confirmation that the ERA applies only during months when diesel is on the margin for the WAF system. Yukon Electrical has disagreed with that interpretation.

Energy Charge Rate Correction - 1993 - 1995 Issue: Yukon Energy requested changes to the calculation of Energy Charge rates for 1993 through 1995. Yukon Electrical responded that this issue was dealt with in late 1994.

Settlement re: Outstanding Rate Schedule 42 Issues

ERA + 10% issue: On an ongoing basis from January 1, 1999, and until such time as the Board approves an amended wholesale rate, Yukon Energy and Yukon Electrical agree the ERA applies without any +10% limit.

ERA Diesel on the Margin Issue: Yukon Energy and Yukon Electrical agree the companies will not adjust payments made January 1, 1993 through to December 31, 1998 with respect to the ERA Diesel on the Margin issue under the Wholesale

Rate Schedule 42. On an ongoing basis from January 1, 1999, and until such time as the Board approves an amended wholesale rate, Yukon Energy and Yukon Electrical agree that the ERA mechanism will apply only during months when diesel is on the margin for the WAF system. This treatment recognizes the fact that this principle is not explicitly set out in the currently approved wording of Rate Schedule 42.

Energy Charge Rate Corrections for 1993 to 1997: Yukon Energy and Yukon Electrical agree that the companies will not adjust any Energy Charge rates or payments made under the Wholesale Rate Schedule 42 for the period up to December 31, 1995 and have made adjustments for the period thereafter up to the date hereof as noted below:

1996 - 6.755 cents/kW.h

1997 - 6.840 cents/kW.h

The required payments reflecting these 1996 and 1997 corrections have already been made to Yukon Energy by Yukon Electrical. On a go forward basis, the 1997 rate of 6.840 cents/kW.h will continue to apply until such time as the Board approves an amended rate.

Board Approval

The companies request that the Board approve the above changes to the 1996 and 1997 Energy Charge rates.

Settlement Payment

In settlement of all claims relating to the three aforementioned matters, Yukon Electrical agrees to pay Yukon Energy \$210,737 for the period January 1, 1993 through to December 31, 1998.

MUTUAL RELEASE

BETWEEN:

YUKON ENERGY CORPORATION, a body corporate
registered to carry on business in the Yukon Territory
(hereinafter called "Yukon Energy")

OF THE FIRST PART

- and -

THE YUKON ELECTRICAL COMPANY LIMITED,
a body corporate registered to carry on business
in the Yukon Territory
(hereinafter called "Yukon Electrical")

OF THE SECOND PART

WHEREAS:

- A. Yukon Electrical and its affiliated and associated companies performed certain functions for Yukon Energy, including providing assistance under the direction of Yukon Energy in the preparation of regulatory filings, under a Management Agreement that was in effect for the period April 1, 1987 through to December 31, 1997.
- B. Subsequent to the 1993/94 General Rate Application filing, a dispute arose between Yukon Energy and Yukon Electrical concerning the Wholesale Rate Schedule 42 that was in effect for the period January 1, 1993 through to December 31, 1998. ("Outstanding Rate Schedule 42 Issues").
- C. During the negotiations concerning the Outstanding Rate Schedule 42 Issues, Yukon Electrical raised certain claims it had against Yukon Energy relative to
 - (i) the negotiations to extend the Management Agreement which took place in 1996 and 1997 and the subsequent termination of that Agreement including the claim that Yukon Energy did not negotiate in good faith; and
 - (ii) the transition costs arising from the Management Agreement, including costs of employee relocation, costs of severance packages, costs of negotiation and the assumption of costs related

to supplemental pensions collectively referred to as the "Management Agreement Claims".

- D. Yukon Energy and Yukon Electrical reached a Settlement Agreement regarding the Outstanding Rate Schedule 42 Issues and the Management Agreement Claims on May 7, 1999 and this mutual release is meant to bring to a close all claims raised by Yukon Energy and Yukon Electrical in relation to the Outstanding Rate Schedule 42 Issues and the Management Agreement Claims.

NOW THEREFORE in consideration of the sum of Two Hundred and Ten Thousand Seven Hundred and Thirty Seven Dollars (\$210,737) now paid by Yukon Electrical to Yukon Energy and other good and valuable consideration (the receipt and sufficiency of which are hereby acknowledged) and in consideration of the sum of Ninety Five Thousand Five Hundred and Forty Two Dollars (\$95,542) now paid by Yukon Energy to Yukon Electrical and other good and valuable consideration (the receipt and sufficiency of which are hereby acknowledged) Yukon Energy and Yukon Electrical hereby agree as follows:

1. YUKON ENERGY DOES HEREBY RELEASE AND FOREVER DISCHARGE YUKON ELECTRICAL, its directors, its officers, employees, agents, successors and assigns, and its affiliated and associated companies, their directors, their officers, employees, agents, successors, and assigns ("Yukon Electrical Releasees") of and from any and all actions, causes of action, claims or demands against Yukon Electrical which Yukon Energy had, has or will have with respect to the Outstanding Rate Schedule 42 Issues.
2. YUKON ELECTRICAL DOES HEREBY RELEASE AND FOREVER DISCHARGE YUKON ENERGY, its directors, its officers, employees, agents, successors and assigns, and its affiliated and associated companies, their directors, their officers, employees, agents, successors, and assigns ("Yukon Energy Releasees") of and from any and all actions, causes of action, claims or demands against Yukon Energy which Yukon Electrical had, has or will have with respect to the Management Agreement Claims.
3. The consideration for this release is accepted voluntarily, and uninfluenced by representations on the part of Yukon Energy or Yukon Electrical.
4. Neither Yukon Energy nor Yukon Electrical admits any liability arising out of the consultation processes, events or decisions which led to the Outstanding Rate Schedule 42 Issues or the Management Agreement Claims.

- 5. This Release binds the successors and assigns of Yukon Energy and Yukon Electrical and enures to the benefit of those persons or corporations.
- 6. Nothing in this Release shall be construed to in any way extinguish or limit the rights of Yukon Energy against any person or corporation other than the Yukon Electrical Releasees, and Yukon Energy specifically preserves any and all rights, manner of action, causes of action, claims or demand it has or may have against any person or corporation other than Yukon Electrical and its affiliated and associated companies.
- 7. Nothing in this Release shall be construed to in any way extinguish or limit the rights of Yukon Electrical against any person or corporation other than the Yukon Energy Releasees, and Yukon Electrical specifically preserves any and all rights, manner of action, causes of action, claims or demand it has or may have against any person or corporation other than Yukon Energy and its affiliated and associated companies.

IN WITNESS WHEREOF Yukon Energy and Yukon Electrical have hereunto fixed their seals attested by the hands of their duly authorized proper officers, this 15th day of July, 1999.

YUKON ENERGY CORPORATION
Per: [Signature]

THE YUKON ELECTRICAL COMPANY LIMITED
Per: [Signature]