

1989-3

YUKON UTILITIES BOARD  
DECISION 1989-3

THE YUKON ELECTRICAL COMPANY LIMITED

DECISION 1989-3

DATED OCTOBER 20, 1989

YUKON UTILITIES BOARD

DECISION 1989-3

FRIDAY, THE 20TH DAY OF OCTOBER, A.D. 1989.

IN THE MATTER OF the "Public Utilities Act",  
being Chapter 143 of the Revised Statutes of  
Yukon, as amended;

AND IN THE MATTER OF an application by  
The Yukon Electrical Company Limited to the  
Yukon Utilities Board for an Order or Orders  
approving changes in existing rates, tolls or  
charges for electric light, power or energy  
and related services supplied to its customers  
within Yukon.

BEFORE:

THE YUKON UTILITIES BOARD

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## ORDER

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APPEARANCES

For The Yukon Electrical Company Limited	:	C.K. Sheard
For Yukon Energy Corporation	:	M.D. Romanow
For the City of Whitehorse	:	E.J. Walter, Q.C.
For Yukon Chamber of Mines	:	Randy Clarkson
For NEW ERA Hydro Corporation	:	Randy Clarkson
For United Keno Hill Mines Limited	:	Ken Watson
For Peter W. Percival	:	Robert Laking
For Yukon Chamber of Commerce	:	Robert Laking

WITNESSES

For The Yukon Electrical Company Limited	:	Grant Lake Gary Bauer Harold Lewis Tony Walker
For United Keno Hill Mines Limited	:	Ken Watson Robert Stirling Larry Crowther
For Yukon Chamber of Mines	:	Randy Clarkson
For NEW ERA Hydro Corporation	:	Randy Clarkson
For the Town of Dawson City	:	Mayor Peter Jenkins
For Yukon Chamber of Commerce	:	Robert Laking

DECISION1. INTRODUCTION

The Yukon Electrical Company Limited (YECL, the Company) filed an Application dated December 30, 1988 with the Yukon Utilities Board (the Board) for an Order or Orders of the Board fixing and approving just and reasonable rates, charges or schedules thereof, for electric light, power or energy and related services to be supplied by YECL, including terms and conditions of service.

In its Application, YECL stated:

"On March 31, 1987, the Yukon Territorial Government (YTG), through its public corporation, the Yukon Energy Corporation (Yukon Energy), acquired the electric utility assets of the Northern Canada Power Commission (NCPC). The transfer agreement between the Yukon Territorial Government and the Government of Canada contained a section which effectively froze the base electrical rates of all Yukon residents for two years. Since March 31, 1987, YTG has formulated its policy with respect to electric utility rates and these policies have been reflected in its Order-In-Council, 1988/150 dated September 12, 1988."

YECL requested that the Board approve the proposed rates for bills issued on and after April 1, 1989 for consumption on and after March 1, 1989. YECL also requested that if the Board is unable to approve the proposed rates on a final basis prior to April 1, 1989, the Board approve them on an interim basis.

Notice of an Interim Hearing was published in the Yukon News and the Whitehorse Star on January 27, 1989. Both papers are regularly circulated throughout the Territory. Pursuant to the public notice an Interim Hearing and Pre-Hearing Conference were held on March 10, 1989 in Whitehorse.

As a consequence of the Interim Hearing the Board issued Interim Order 1989-1 on March 17, 1989 wherein the Board fixed and approved the requested rates as interim rates to be effective for billings issued on and after April 1, 1989 for consumption on and after March 31, 1989. The Electric Service Regulations contained in the Application were also approved on an interim basis effective April 1, 1989. The Board ordered that the interim rates, tolls or charges and Electric Service Regulations were subject to further review by the Board and may be changed as the Board may direct.

At the hearing of the interim application, YECL filed its general rate application, including its proposed rate schedules and proposed Electric Service Regulations, as Exhibit 2. Various other documents in support of the general rate application were filed at the hearing of the interim application and subsequently at the hearing of the main application. Intervenors were provided with an opportunity to make written information requests of YECL and these requests elicited written responses which were made available to all parties prior to the hearing of the main application. Written information requests by the Board, together with responses thereto, were also made available to all parties prior to the hearing of the main application.



The hearing of the main application was held in Whitehorse June 6 - 9, 1989. Subsequent to the Hearing, the Applicant and Intervenors were provided with the opportunity to submit written Argument and Reply Argument. During the course of the Hearing, members of the public who were not registered as Intervenors were invited to participate in the proceeding.

The Board wishes to express its appreciation to the Companies and Intervenors for their contribution to the regulatory process by participating in the hearing.

The Board in this Decision will determine the Company's rate base, fair return on rate base, and total electric utility revenue requirement for the approved test years and will provide reasons with respect to the Board's Decision on these matters. The Board will deal with the matters of rates and Electric Service Regulations in Decision 1989-5.

## 2. TEST YEARS

The Board approves the forecast years 1989 and 1990 as the test years for the application as requested by the Company.

### 3. RATE BASE

#### 3.1 General

The determination of a rate base for the purpose of fixing just and reasonable rates, tolls or charges is governed by the provisions of Section 32 of the Public Utilities Act which provides as follows:

"32.(1) The board, by order, shall determine a rate base for the property of a public utility used or required to be used to provide service to the public, and may include a rate base for property under construction, or constructed or acquired, and intended to be used in the future to provide service to the public.

(2) The board, by order, shall fix a fair return on the rate base.

(3) In determining a rate base the board shall give due consideration to the cost of the property when first devoted to public utility use, to prudent acquisition cost less depreciation, amortization or depletion, and to necessary working capital.

(4) In fixing the fair return that the public utility is entitled to earn on the rate base, the board shall give due consideration to all those facts that in the opinion of the board are relevant.

(5) Notwithstanding the other provisions of this section, the board may adopt any just and reasonable basis for determining a method of calculating a fair return on property that is being constructed or that has been constructed or acquired but is not yet being used to provide service to the public."

Pursuant to Section 32 the Board has determined a rate base for the 1989 and 1990 test years as shown in Schedule "A" attached hereto.

### 3.2 Gross Plant In Service

YECL sets out its calculation of Gross Plant In Service in Section 5, Schedule 3 of Exhibit 2. A summary of capital expenditures forecast for the test years 1989 and 1990 is contained in Schedule 3(a). In total the Company expects to make capital expenditures of \$5,644,000 and \$4,864,000 in the years 1989 and 1990, respectively. After deducting customer contributions to these projects, the total capital investment by the Company is forecast to be \$4,002,000 and \$4,685,000 for the years 1989 and 1990, respectively.

During the course of the proceeding the Company's experience in forecasting capital expenditures of prior years was reviewed and it was determined that capital expenditures actually incurred during the three year period 1986 to 1988, inclusive, varied from 67% to 95% of the amount forecast. Company witnesses explained that it was very difficult to forecast capital expenditures accurately due to the large size of some of the capital projects and the difficulty encountered in determining the precise timing of the expenditures.

Company witnesses explained that YECL is not likely to proceed with the construction of the McIntyre Creek generating plant as originally planned and reflected in the Company's application. However, they also explained that inasmuch as the generating plant was not forecast to be commissioned before the end of 1990 the deferral would not impact on the Company's revenue requirement for either 1989 or 1990.

YECL has forecast a requirement to replace units in certain isolated plants with more fuel efficient units. Concurrently the plant operation will be automated. The benefits arising from the replacement and automation projects include increased fuel efficiency over a wider load range, the ability to meet load growth, increased safety and decreased outages.

Due to the need for increased peaking capacity on the Whitehorse/Aishihik system the Company plans to install standby units in Haines Junction in 1990. Locating units in locations like Haines Junction is considered preferable by the Company to the installation of additional capacity in the same location as hydro generators.

The Company also proposes to acquire a second mobile generating unit to be used at times of system disruption in any community. The unit will also have the capability of being transported to Old Crow.

The Board accepts YECL's forecast of capital expenditures for the test years 1989 and 1990 for the purpose of this Decision.

### 3.3 Accumulated Depreciation

YECL calculated the 1989 and 1990 accumulated depreciation and depreciation expense based on depreciation rates determined by a depreciation study prepared with reference to the year 1984. At that time it was determined that the Company had recorded depreciation of \$5.9 million on its books of account and that the depreciation requirement was \$5.6 million. The difference of \$0.3 million was amortized over the four years 1985 to 1988 inclusive. Company

witnesses agreed that although the process was designed to result in the removal of the difference between the recorded depreciation reserve and the depreciation reserve requirement, this objective was not accomplished on an account by account basis. The Company explained that it intended to examine this matter in depth during its next depreciation study, which it expects to conduct in the very near future, and this study would be available the next time YECL appeared before the Board.

Company witnesses also explained that the recorded gross salvage value of retired items returned to stores is overstated because such items are valued at average unit inventory cost. It was also explained that until recently the same methodology had been employed by YECL's parent company, Alberta Power Limited, but that Alberta Power Limited had recently changed its method so that such retired items returned to stores would be valued at one-half of average cost.

The Board holds the view that depreciation rates should be based on detailed depreciation studies carried out by utilities on a regular basis. Having examined the evidence on depreciation, the Board accepts YECL's calculation of depreciation rates and accumulated depreciation for the purpose of this Decision. The Board directs YECL to prepare a depreciation study, which should be available at the time of the Company's next general rate application.

### 3.4 Necessary Working Capital

The inclusion of necessary working capital in rate base is in recognition of the investment generally required by a utility due to the time lag that occurs between the payment of expenditures and the receipt of revenue related thereto. There may also be included in necessary working capital an amount to reflect the utility's investment in inventories of materials and supplies necessary for the operation and maintenance of its system.

YECL calculated its necessary working capital by reference to a lead/lag study. The study indicated that the average lag in revenue was 52 days and that the average lag in the payment of operating expenses and in payment of income tax installments amounted to 27 days and 15 days, respectively.

The lead/lag study on which the Company's application was based was prepared by reference to the Company's 1985 operations. This study was updated in 1988 and provided to the Board in response to an information request. The 1988 updated study showed a revenue lag of 51 days, compared with 52 days originally submitted. In response to an undertaking, the Company filed revised schedules which reflected a decrease of 1 day in the net lag for both operating expenses and income taxes.

On cross-examination, YECL's witness indicated that as a consequence of the introduction of computerized meter reading the revenue lag has been reduced by approximately 3 days on average. Company witness also indicated that if all of YECL's customers paid their bills on time, the revenue lag would be approximately 36 days. Company witnesses further advised that at one time the Company attempted to reduce the revenue lag by mailing bills from Whitehorse rather than Edmonton, but determined at that time that the result of such a change would have been to increase postage expense significantly.

The Board considers that YECL should take all reasonable steps to minimize the lag in collection of its revenue. Accordingly, the Company is directed to examine the alternatives available to it in reducing the lag in collection of its revenue and make such proposals as it considers reasonable to the Board at the time of its next general rate application.

In response to questioning by the City of Whitehorse, Company witnesses explained that, generally, other operating expenses are paid on a 25 to 30 day basis and therefore an average lag of 27.5 days has been applied to such expenses. YECL considers this lag to be appropriate in that such expenses are not invoiced necessarily on a monthly basis but rather as the services are provided. The City of Whitehorse submitted in its Argument that 15 days should be added to the 27.5 lag days for the purpose of the lead/lag study.

The Board accepts YECL's amended calculation of working capital for the purpose of the current Decision, however, it directs that for the purpose of its next general rate application YECL address the matter of the appropriateness of adding to the lag days of other operating expenses an allowance to reflect an additional lag relating to the period between which services are rendered and suppliers' bills are received.

### 3.5 Electric Utility Rate Base

After having given consideration to the relevant evidence, the Board has determined the electric utility rate base for YECL for the two test years to be as follows and as shown on Schedule "A" attached:

1989	\$15,730,000
1990	17,144,000.

## 4. FAIR RETURN ON RATE BASE

### 4.1 General

Having determined the rate base for YECL, the Board is also required pursuant to Section 32(2) of the Public Utilities Act to "fix a fair return on the rate base". In fixing the fair return on rate base, the Board considers it appropriate to take into consideration the rate of return applicable to each component of the Company's capital structure which it considers to be financing the rate base.



Generally, the Board considers that a fair return on rate base is a return that will result in providing the customers of the utility with the lowest utility rates practicable consistent with the utility's duty to furnish safe, adequate and proper service on an ongoing basis. The return should be sufficient to enable the utility to maintain its property, plant and equipment in effective and efficient operating condition, and at the same time enable the utility to maintain its financial integrity and thus enable it to obtain necessary capital on reasonable terms.

YECL forecast a return requirement of \$1,878,000 for 1989 and \$2,070,000 for 1990. After taking into consideration amendments to the Application during the Hearing, the forecast total return was \$1,857,000 for 1989 and \$2,021,000 for 1990. During the course of the proceeding, YECL reduced its requested rate of return on common equity from 14.625% for both the 1989 and 1990 test years to 14.5% for the 1989 test year and 14.25% for the 1990 test year.

#### 4.2 Capital Structure

In its Decision 1983-3 dated November 14, 1983 the Board directed YECL to address the matter of an appropriate capital structure for a utility operating in Yukon. In response to that direction YECL determined that it was appropriate to adjust its capital structure in December 1985 so that it would consist of debt of approximately 35%, preferred shares of approximately 30%, and common equity of approximately 35%. In order to accomplish this capital restructuring,

YECL issued to its parent, Alberta Power Limited, long-term debt of \$4,011,000, having a maturity date of July 1, 1995 and bearing interest at the rate of 11.97%; \$3,440,000 of preferred shares to its parent retractable on October 15, 1993 with an indicated dividend rate of 8.63%; and 1,560 common shares at a price of \$1,900 each. The rates and terms of issue of the long-term debt and preferred shares were designed to reflect the cost to Alberta Power Limited of the capital transferred to YECL from time to time during the period from 1968 to 1985.

On cross-examination a Company witness explained that by the end of 1990 the portion of the Company's capitalization attributable to debt will have increased and the portion attributable to preferred shares will have decreased as a result of changed market conditions resulting from a change in taxation rules respecting preferred dividends.

In fixing a fair return, the Board has first considered whether the capital structures proposed by YECL for the test years 1989 and 1990 are appropriate for determining the cost of capital to YECL. The Board has accepted the proposed capital structures for the purpose of fixing a fair return on rate base. These capital structures are outlined on Schedule "B" attached.

#### 4.3 Cost of Debt

In its evidence filed in advance of the proceeding, YECL indicated that in 1989 a \$2,500,000 debenture would be issued at a cost of 11.5% and in 1990 a \$2 million debenture issue would be placed at a rate of 10.75%. During the course of the proceeding, a Company witness indicated that due to a perceived downward trend in long-term interest rates the expected rates applicable to these issues were amended to 10.75% for 1989 and 10.25% for 1990. These rates were reflected in the return requirement provided to the Board by way of an undertaking subsequent to the completion of the Hearing.

The Board is satisfied that the incremental borrowing costs of 10.75% for 1989 and 10.25% for 1990 are reasonable in the circumstances. The Board therefore approves a mid-year cost rate for long-term debt of 11.63% for 1989 and 11.36% for 1990 as shown on Schedule "B" attached.

#### 4.4 Cost of Preferred Shares

The cost of preferred shares remains unchanged since the reorganization of the Company's capital structure in 1985. The Board considers the average embedded cost rate of 8.63% as shown on Schedule "B" attached to be reasonable.

4.5 Fair Rate of Return on Common Equity

YECL requested Dr. S.F. Sherwin of Foster Associates to prepare abbreviated evidence to support the Company's request for a rate of return on the portion of rate base deemed to be financed by common equity. Based on Dr. Sherwin's evidence, and the assumption that YECL's business and financial risks were equivalent to those of a low risk utility, the Company requested a rate of return on common equity of 14.625% for both 1989 and 1990.

Dr. Sherwin concluded that a fair rate of return on equity deemed to be financing rate base for a low risk utility is 14.625% for a common equity ratio of 35%. Dr. Sherwin arrived at his conclusion based upon the application of the comparable earnings, discounted cash-flow (DCF) and equity risk premium tests. His return recommendation was based principally upon the results of the comparable earnings test applied to industrials over an entire business cycle. His comparative reference groups were eight selected groups of Canadian industrial companies which he considered to be of approximately comparable risk to a high grade electric utility.

The overall result of the three tests as applied to the reference groups was a range of 14.5% to 14.75%. Dr. Sherwin gave principal weight to the comparable earnings technique, and concluded that the fair return for YECL was 14.625% for both test years.

Subsequent to the submission of this evidence, Dr. Sherwin prepared full evidence with respect to an application by Alberta Power Limited before the Public Utilities Board of Alberta. In that application Dr. Sherwin recommended a fair rate of return of 14.5% for 1989 and 14.25% for 1990. Based on the changing economic conditions reflected in this evidence, YECL recommended that the Board consider revised rates of return of 14.5% for 1989 and 14.25% for 1990 to be appropriate for YECL's Application.

In the Joint Intervention Submission by the Yukon Chamber of Commerce and P.W. Percival, P.Eng., the position was advanced that YECL's business risk was less than that of its parent, Alberta Power Limited, because YECL had virtually no exposure to industrial customers, its sales to residential, general service and street lighting customers were relatively stable, and it was cushioned from the impact of costs associated with the excess generating capacity in the event that its customers' demands decline.

In its Argument, the City of Whitehorse (the City) submitted that the business risks of YECL were less than those of Yukon Energy Corporation (YEC). Accordingly, the City proposed that an appropriate rate of return on common equity for YECL should not exceed 12.5%.

Under cross-examination Company witnesses indicated that capital market conditions were somewhat different than they were in the latter part of 1987, although they agreed that long-term interest rates, a factor which has a close relationship to rate of return on common equity, had not changed over the intervening period. The witnesses also acknowledged that in two appearances before the Alberta Public Utilities Board, Dr. Sherwin had recommended rates of return on common equity of 14.75% in 1986 in the case of Alberta Power Limited and 14.375% in 1987 in the case of Northwestern Utilities Limited. The Company witnesses also acknowledged that in the aforementioned cases the financial expert appearing on behalf of Intervenor recommended rates of return of 12.625% to 12.875% for Alberta Power for 1987 and 13.25% to 13.75% for 1988. In the case of Northwestern Utilities Limited, the same witness recommended a rate of return of 12.75% to 13% for 1987 and 13.25% to 13.75% for 1988.

The Board notes that the Alberta Public Utilities Board awarded Northwestern Utilities Limited a rate of return of 13.25% on the portion of rate base deemed to be financed by common equity for 1987 and 1988, and awarded Alberta Power Limited a rate of return of 13% for the years 1986 and 1987. As explained by Company witnesses, the Alberta Public Utilities Board's award to Alberta Power Limited included an unidentified downward adjustment in rate of return to reflect special circumstances relative to the commissioning of a new generating plant during the test period. Company witnesses also advised the Board that the British Columbia Utilities Commission has stated that a fair and reasonable return on common equity for Northland Utilities (B.C.) Limited should be in the range of 14.00% to 14.75% for test years 1989 and 1990.

The Board considers that there is no precise method for the fixing of the fair return on that portion of rate base which it deems to be financed by common equity capital. Any method used is largely dependent upon subjective judgments. After considering all of the evidence presented at the Hearing, together with the Arguments and Replies of the parties, the Board finds a fair rate of return for common equity capital to be 13.5% for 1989 and 1990.

Having considered the forecast capital structure submitted by YECL to be appropriate for the fixing of the fair return on rate base, and having considered the cost rates of the components of the capital structure for YECL which are assumed to be financing the forecast rate base, the Board hereby fixes for the test years the fair return on rate base for YECL as follows and as set out in Schedule "B" attached:

1989 Forecast	\$1,802,785
1990 Forecast	\$1,974,847

5. ELECTRIC UTILITY REVENUE REQUIREMENT

5.1 Fuel Cost

The fuel requirements of YECL are combined with those of Alberta Power Limited, Northland Utilities Limited and Canadian Utilities Limited, and comparative bids are sought for the supply of fuel.

Savings due to the combined purchasing activities of these companies are passed on to the consuming utilities and accordingly to their customers. YECL's current fuel purchase contract became effective March 1, 1989 and extends for a period of one year. During this time, the transportation component of the price remains fixed and the commodity component is pegged to the world oil price. Under this mechanism variations in world oil price from those of November 1988 are reflected in YECL's cost of fuel.

YECL forecast its average cost of fuel to be 30 cents per litre for 1989. For the purpose of determining its 1990 forecast, YECL added an inflation factor of 4 percent to arrive at an average cost of 31.2 cents per litre.

## 5.2 Purchased Power

YECL purchases approximately 88% of its electricity from YEC. Inasmuch as rates charged by YECL and YEC pursuant to Order-In-Council 1988/150 are interdependent, YECL's cost of electricity purchased from YEC is dependent on the aggregate costs of the two companies. The Board is satisfied that the method used by YEC and YECL to determine YECL's purchased power cost fairly reflects the provisions of Order-In-Council 1988/150.



### 5.3 Operating and Maintenance Expenses

In its material filed in advance of the Hearing, YECL provided explanations for variations in operating expenses over the period 1987 to 1990. In addition, Company witnesses provided further explanations of such variances during the course of the proceeding. The principal reasons for variations in general and administrative expenses included increases in the number of customers, energy sales and rate base over the period, together with a forecast inflation in the cost of operating expenses of four percent in each of the years 1989 and 1990.

With respect to maintenance expense, it was explained that the Company forecast the overhaul of one generating unit in each year, and, although variations occurred, such forecasts were generally reasonably accurate. Company witnesses also explained that operating and maintenance expenses varied from year to year, in part as a result of the assignment of personnel to maintenance for capital projects as well as to projects for YEC.

One reason given for the increase in manpower requirements in 1988 was the Company's decision to revert to reading residential meters in Whitehorse on a monthly basis to reduce the large number of customer complaints related to the estimating process previously carried out by the Company.

A significant proportion of the Company's general and operating expenses consists of charges by Alberta Power Limited in respect of services provided to the Company, principally in the areas of customer billing and accounting, revenue collection, administrative expense and special studies. These costs not only reflect those initially incurred by Alberta Power Limited but also those initially incurred by Canadian Utilities Limited and allocated to Alberta Power Limited. The method used by Alberta Power Limited to allocate operating expenses to YECL is dependent upon the nature of the expense being allocated. In general, the allocation is based on actual or estimated usage, the relative number of customers or the relative rate bases of the two companies. Company witnesses explained that with respect to a number of operating expenses, the allocation based on the number of customers or rate base resulted in the smoothing of charges by Alberta Power Limited over a period of years. It was the objective of Alberta Power Limited to recover from YECL over a period of time the actual cost of providing the services to that company.

The Board accepts YECL's calculation of operating and maintenance expenses for the purpose of this Decision.

#### 5.4 Depreciation

As discussed under Section 3.3, depreciation was calculated using depreciation rates developed in 1985. YECL considers such depreciation rates to be conservative in that net salvage percentages used to calculate depreciation rates are either zero or positive, and the Company expects that the cost of retiring much of its depreciable plant will exceed the gross salvage realized. Customer contributions

are amortized at the same rates as depreciation for the respective plant accounts. Further comments respecting depreciation expense are contained in Section 3.3 of this Decision.

#### 5.5 Income Taxes

YECL's income taxes are calculated using rates of income tax expected to prevail during the test years 1989 and 1990. In addition, the Company claims maximum allowable deduction for income tax purposes which results in the flowing through to its customers of the benefit of all income tax deductions claimed by the Company. The Board accepts YECL's calculation of income taxes for the purpose of this Decision.

#### 5.6 Income Tax Rebate

Order-In-Council 1988/150 directed in Paragraph 5 that:

"The Board shall treat any monies to be received by The Yukon Electrical Company Limited from the Government of the Yukon, pursuant to the Government of the Yukon's prevailing policy with respect to rebate of income tax paid by The Yukon Electrical Company Limited, as acting in corresponding reduction, in the year in which such income tax is paid, of The Yukon Electrical Company Limited's revenue requirements as determined from time to time by the Board."

YECL takes the position that inasmuch as income tax rebates will be refunded directly to eligible Yukon electric energy consumers, and thus no monies are to be received by YECL, no reduction is required to be made in YECL's revenue requirement as a consequence of the Order-In-Council.

The Board accepts YECL's treatment of the income tax rebate for the purposes of this Decision.

#### 5.7 Hearing Costs

YECL advised that the amount of \$21,160 had been incorrectly included in the 1990 revenue requirement but did not consider an adjustment to be necessary. The Board directs YECL to reduce its 1990 revenue requirement by this amount.

#### 5.8 Total Revenue Requirement

The Board directs YECL to prepare a revised calculation of total utility revenue requirement for the test years 1989 and 1990 in accordance with this Decision and Decisions 1989-4 and 1989-5.

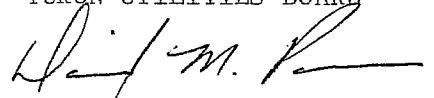
ORDER

NOW THEREFORE IT IS ORDERED THAT:

Yukon Electrical Company Limited shall prepare and file with the Board within thirty (30) days a revised calculation of total utility revenue requirement for the test years 1989 and 1990 in accordance with this Decision and Decisions 1989-4 and 1989-5.

DATED AT WHITEHORSE, YUKON THIS 20TH DAY OF OCTOBER, 1989.

YUKON UTILITIES BOARD

A handwritten signature in dark ink, appearing to be "D. M. P.", written over a horizontal line.

CHAIRMAN

FOLLOWING ARE

SCHEDULES "A" AND "B"

(Consisting of 4 Pages)

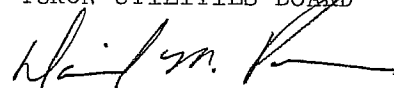
ATTACHED TO AND FORMING PART OF

YUKON UTILITIES BOARD

DECISION 1989-3

DATED OCTOBER 20, 1989

YUKON UTILITIES BOARD

A handwritten signature in dark ink, appearing to read "H. M. K.", is written over the printed name of the Chairman.

CHAIRMAN

YUKON ELECTRICAL COMPANY LIMITED  
RATE BASE

	1989 AS FILED	1989 AS ALLOWED
PROPERTY PLANT AND EQUIPMENT	\$	\$
Balance, beginning of year	27,649,000	27,649,000
Balance, end of year	32,868,000	32,868,000
Balance, mid-year	30,258,500	30,258,500
ACCUMULATED DEPRECIATION		
Balance, beginning of year	(9,925,000)	(9,925,000)
Balance, end of year	(11,009,000)	(11,009,000)
Balance, mid-year	(10,467,000)	(10,467,000)
MID-YEAR CONSTRUCTION IN PROGRESS	(974,000)	(974,000)
MID-YEAR DISMANTLING RESERVE	(87,500)	(87,500)
MID-YEAR CONTRIBUTIONS FOR EXTENSIONS	(5,202,000)	(5,202,000)
NECESSARY WORKING CAPITAL	2,202,000	2,202,000
MID-YEAR RATE BASE	15,730,000	15,730,000

YUKON ELECTRICAL COMPANY LIMITED  
RATE BASE

	1990 AS FILED	1990 AS ALLOWED
PROPERTY PLANT AND EQUIPMENT	\$	\$
Balance, beginning of year	32,868,000	32,868,000
Balance, end of year	37,358,000	37,358,000
Balance, mid-year	35,113,000	35,113,000
ACCUMULATED DEPRECIATION		
Balance, beginning of year	(11,009,000)	(11,009,000)
Balance, end of year	(12,233,000)	(12,233,000)
Balance, mid-year	(11,621,000)	(11,621,000)
MID-YEAR CONSTRUCTION IN PROGRESS	(3,037,000)	(3,037,000)
MID-YEAR DISMANTLING RESERVE	(92,500)	(92,500)
MID-YEAR CONTRIBUTIONS FOR EXTENSIONS	(5,524,500)	(5,524,500)
NECESSARY WORKING CAPITAL	2,306,000	2,306,000
MID-YEAR RATE BASE	17,144,000	17,144,000



YUKON ELECTRICAL COMPANY LIMITED  
COST OF CAPITAL

AS FILED  
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	1989 MID-YEAR BALANCE	1989 CAPITAL RATIOS	1989 MID-YEAR RATE BASE	1989 COST RATE	1989 RETURN
	\$	%	\$	%	\$
Long term debt	6,761,000	42.51	6,686,610	11.630	777,653
Preferred stock	3,440,000	21.63	3,402,150	8.630	293,606
Common stock	5,479,000	34.45	5,418,715	14.500	785,714
No cost capital	225,000	1.41	222,524		
	15,905,000	100.00	15,730,000	11.805	1,856,972
	=====	=====	=====	=====	=====

AS ALLOWED  
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	1989 MID-YEAR BALANCE	1989 CAPITAL RATIOS	1989 MID-YEAR RATE BASE	1989 COST RATE	1989 RETURN
	\$	%	\$	%	\$
Long term debt	6,761,000	42.51	6,686,610	11.630	777,653
Preferred stock	3,440,000	21.63	3,402,150	8.630	293,606
Common stock	5,479,000	34.45	5,418,715	13.500	731,527
No cost capital	225,000	1.41	222,524		
	15,905,000	100.00	15,730,000	11.461	1,802,785
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YUKON ELECTRICAL COMPANY LIMITED  
COST OF CAPITAL

AS FILED  
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	1990 MID-YEAR BALANCE	1990 CAPITAL RATIOS	1990 MID-YEAR RATE BASE	1990 COST RATE	1990 RETURN
	\$	%	\$	%	\$
Long term debt	9,011,000	45.68	7,831,521	11.360	889,661
Preferred stock	3,440,000	17.44	2,989,727	8.630	258,013
Common stock	7,050,000	35.74	6,127,203	14.250	873,126
No cost capital	225,000	1.14	195,549		
	19,726,000	100.00	17,144,000	11.787	2,020,801
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AS ALLOWED  
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	1990 MID-YEAR BALANCE	1990 CAPITAL RATIOS	1990 MID-YEAR RATE BASE	1990 COST RATE	1990 RETURN
	\$	%	\$	%	\$
Long term debt	9,011,000	45.68	7,831,521	11.360	889,661
Preferred stock	3,440,000	17.44	2,989,727	8.630	258,013
Common stock	7,050,000	35.74	6,127,203	13.500	827,172
No cost capital	225,000	1.14	195,549		
	19,726,000	100.00	17,144,000	11.519	1,974,847
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