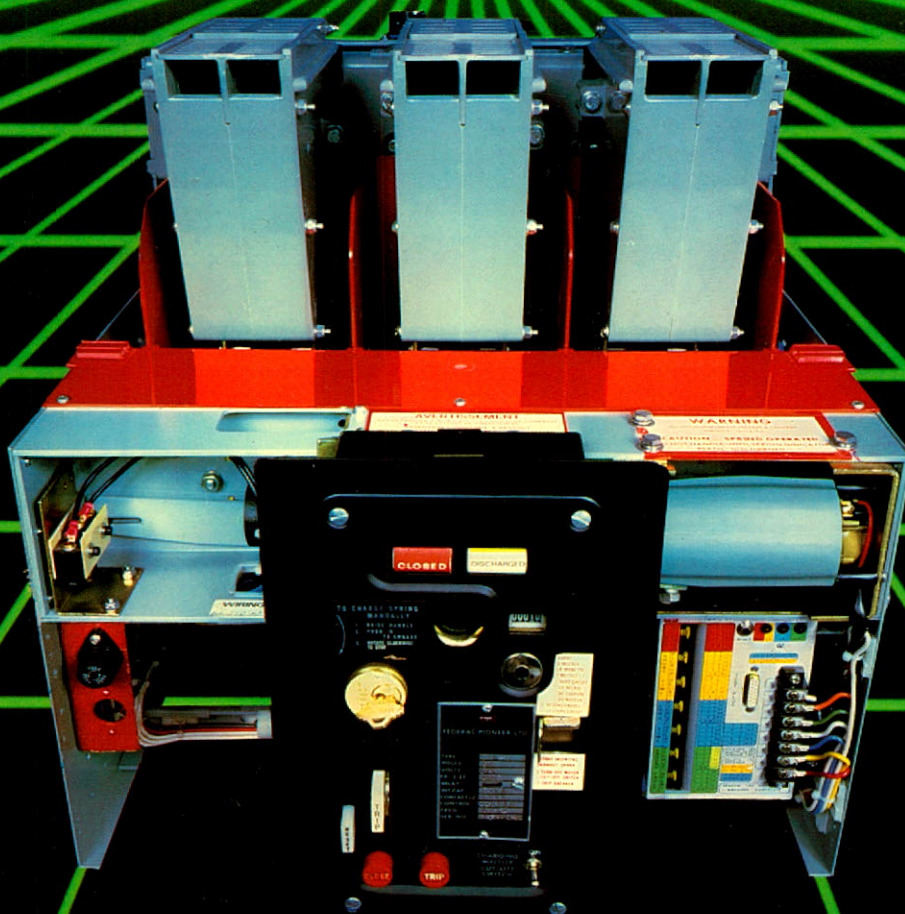




Federal Pioneer Limited  
1982 Annual Report



# Federal Pioneer Limited

## The Corporation

Federal Pioneer Limited was first incorporated in Manitoba on January 15, 1946 and has since been continued under the Canada Business Corporations Act by Certificate of Continuance issued on January 27, 1978.

It is engaged in the manufacture and sale of electrical equipment—primarily that used in the distribution of electrical power. Major product lines include:

Power and distribution transformers  
Circuit breakers  
Switchgear and low voltage distribution equipment  
Electric heaters

12 manufacturing plants and 19 sales offices are located across Canada and a subsidiary company operates a manufacturing facility and sales office in Great Britain. In total the Corporation employs approximately 2,500 people.

*Si vous désirez recevoir ce rapport annuel en français veuillez vous adresser à:*

*Le Secrétaire  
La Cie Federal Pioneer Ltée  
19 Waterman Avenue  
Toronto, Ontario  
M4B 1Y2*

## The Annual Meeting of Shareholders

The annual meeting of the shareholders of Federal Pioneer Limited will be held in the British Columbia Room of the Royal York Hotel, 100 Front Street West, Toronto, Ontario, Canada on Thursday, the 28th day of April 1983 at the hour of 11:00 o'clock in the forenoon (E.D.S.T.)

## Cover

The cover depicts the new "H3" Power Circuit Breaker successfully designed and developed at your Corporation's Bramalea, Ontario Plant. Further details may be found on pages 4 and 5.

## Shareholder Information

Shareholders as at December 31

	1982		1981	
	shareholders	shares held	shareholders	shares held
Residents of Canada	377	498,649	370	498,741
Residents of U.S.A.	6	*730,382	5	*730,357
Others	2	68	1	1
	385	1,229,099	376	1,229,099

*\*Includes 729,057 owned by Parent Company, Federal Pacific Electric Company of Newark, N.J., U.S.A.*

## Share Trading Summary

	1982	1981
Year ended December 31		
Shares traded	70,293	125,169
Price range	\$47—\$57	\$43¾—\$55
Closing price at end of year	\$57	\$51
Valuation Day price (December 22, 1971)	\$17.50	

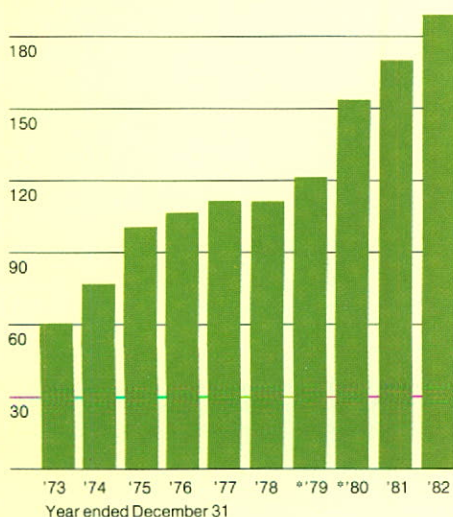


## Financial Highlights

Year ended December 31	1982	1981	Change %
Net sales	<b>\$188,133,880</b>	\$169,514,963	+ 11.0
Income before income taxes and extraordinary item	<b>20,632,709</b>	18,524,767	+ 11.4
Income before extraordinary item	<b>12,238,735</b>	10,209,311	+ 19.9
Net income for the year	<b>12,238,735</b>	9,830,876	+ 24.5
Income before extraordinary item per sales dollar (cents)	<b>6.5</b>	6.0	+ 8.3
Earnings per share:			
Before extraordinary item	<b>9.96</b>	8.31	+ 19.9
After extraordinary item	<b>9.96</b>	8.00	+ 24.5
Dividends declared	<b>2,458,198</b>	2,089,468	+ 17.6
Purchases of property, plant and equipment	<b>5,977,477</b>	4,376,944	+ 36.6
Depreciation and amortization provided for the year	<b>2,994,950</b>	2,675,978	+ 11.9
Working capital at end of year	<b>71,620,651</b>	62,433,446	+ 14.7
Shareholders' equity at end of year	<b>87,045,465</b>	77,264,928	+ 12.7
Equity per common share at end of year	<b>70.82</b>	62.86	+ 12.7

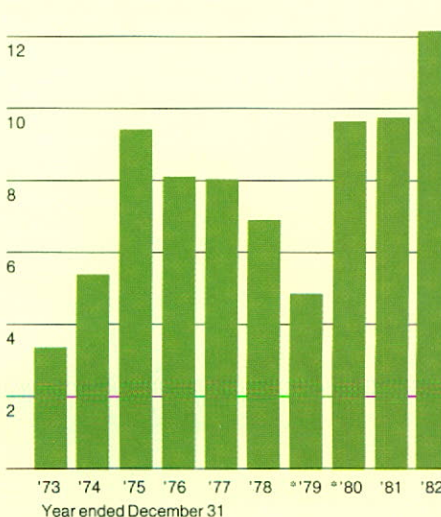
### Net sales

\$210 million

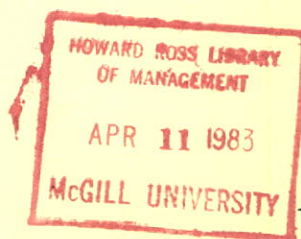


### Net Income

\$14 million



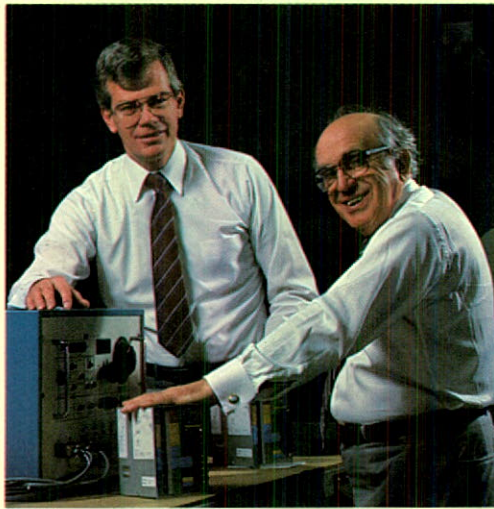
\*Figures for the year 1979 consist of the ten months ended October 31 1979 as audited, plus two months ended December 31 1979 unaudited. Figures for the year 1980 consist of the fourteen months ended December 31 1980 as audited, less two months ended December 31 1979 unaudited.





## Report to the Shareholders

*Mr. W. B. Korb and Mr. A. G. Daley examining a USD relay at the Corporation's Waterman Avenue plant.*



Federal Pioneer Limited set new records for both sales and earnings in 1982. Despite the downturn in the world economy during the year all divisions of the Corporation combined to achieve these record levels. The sales volume increased by eleven percent and net income increased by twenty-four percent.

Throughout the year the Corporation had a substantial backlog of orders for engineered products which enabled it to maintain a strong level of sales and productivity in the plants that manufacture such products. During the first half of the year sales of standard products such as Stab-lok systems and safety switches were weak as several factors combined to reduce demand. Housing starts and commercial construction were depressed and the Corporation's distributors were reducing their own inventory investments. In the second half of the year although there was no significant improvement in new construction, our distributors commenced re-ordering as their inventories required replenishment and new business in exports, together with seasonal increases in electric heating installations, assisted in improving sales volumes.

During the past twelve months the Product Development and Engineering Departments have been engaged in a concentrated program of product improvement

and cost reduction. Key products which have benefited from this program include service protectors (a device used for the control and protection of large blocks of power), certain electric heating units, Stab-lok circuit breaker systems, ground fault protection devices, load-break switches, dry-type transformers and on-load tap changer equipment.

In addition several new products have been developed. The Federal Pioneer electric furnace was announced mid-year and has already achieved excellent market acceptance. A 240 volt ground fault circuit breaker has recently been developed and will be in production in early 1983. Other products have also been added to complement existing lines some of which are illustrated on page 8 of this report.

Federal Pioneer's products have been installed in many important new construction projects across Canada. These products include power transformers and switchgear for virtually every major Canadian electrical utility, unit substations and switchgear for mines and resource industries and complete electrical distribution systems for many prestigious commercial developments, hospitals and public buildings. One of the outstanding achievements has been the successful manufacture and testing of the first group of 500kV DC converter transformers which are described elsewhere in this report.

The Corporation's export business grew substantially in 1982. While faced with weak domestic demand for standard products the export department attained record levels of securements for Stab-lok systems. In addition to these standard product sales the Corporation also completed a number of engineered products contracts including equipment for a large paper company in Nigeria and for electrical utilities in Haiti, Honduras, Kenya and the Philippines. The year also marked the establishment of a world marketing mandate for apparatus products. Due to long lead times for this product range the impact of this development will not be felt until future years.



The British subsidiary recovered from its earlier unsatisfactory performance despite a continuing depressed market. This improvement is the result of a number of changes which became effective early in the year. While this unit is still not operating at a level consistent with the rest of the Corporation there has been a steady improvement. It is believed that a continuation of the current programs of sales emphasis, cost reduction and prudent asset management will assure further improvements in operating profit.

Late in 1982 the Corporation purchased the Markham, Ontario plant of the Amalgamated Electric Corporation, Limited. Amalgamated is a wholly-owned subsidiary of Canadian General Electric Company Limited and had been in the electrical manufacturing business in Canada for over fifty years. Many of the products manufactured at Markham are complementary to those of Federal Pioneer and will enhance the total product offering. In addition and co-incidental with this purchase the Corporation entered into a licensing agreement to manufacture and sell the complete range of General Electric designed moulded case circuit breakers under the Federal Pioneer name for the Canadian market. These events will have important beneficial effects on the Corporation's operations although the full benefit will not be realized immediately.

The Corporation enjoys stronger support than ever before from its customers both domestically and overseas and of course, without this confidence the results for 1982 could not have been achieved.

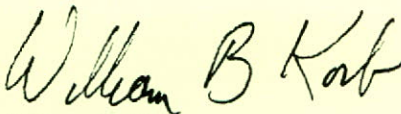
The year 1983 will be a difficult one. The Corporation's sales result mainly from large capital expansion projects on the part of utilities, industries, institutional and commercial developers. It is evident that the current recession has curtailed such investments and the impact is noticeable in the present backlog of the Corporation. In 1983 the Corporation will aggressively seek new markets in addition to continuing its service to its traditional markets.

This report includes a tribute to the late Benjamin W. Ball whose leadership as President and Chief Executive Officer played such an important role in the success of the Corporation. His leadership was best exemplified by the development of a strong executive staff. In early 1982 at his request the Board approved the appointment of five of the Corporation's officers as Senior Vice-Presidents and named five other senior managers to the position of Vice-President.

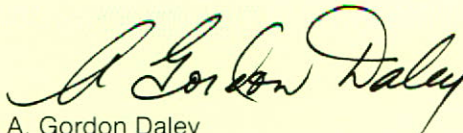
Following Mr. Ball's death in October, 1982 the Board appointed William B. Korb to the position of Chairman of the Board and A. Gordon Daley was appointed a Director and President and Chief Executive Officer of the Corporation. Mr. Korb is a Group Vice-President of Reliance Electric Company and has served as a Director of the Corporation since 1979. Mr. Daley previously held the office of Senior Vice-President and General Manager of the Distribution Division of the Corporation and has been employed in various senior positions with the Corporation for over thirty-one years.

The results that the Corporation attained during 1982 are the best testimony to the support and dedication provided by its employees at all levels both domestically and overseas. The Directors recognize the excellent contribution that each of these employees has made and express their sincere appreciation.

Submitted on behalf of the Board of Directors



William B. Korb  
Chairman of the Board



A. Gordon Daley  
President and Chief Executive Officer

February 17, 1983



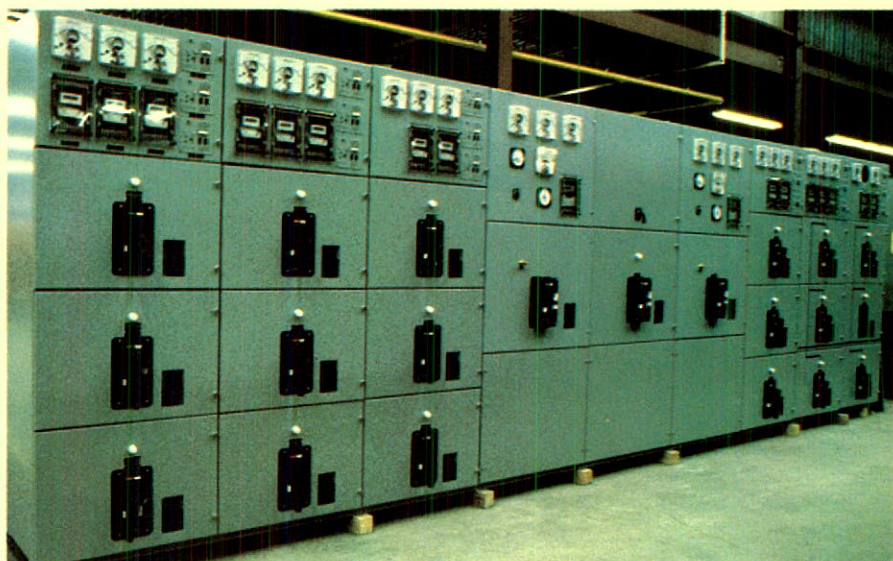
## "H-3" air circuit breakers

With the introduction in 1982 of the new "H-3" low voltage power air circuit breakers your Corporation passed another important milestone in the history of its production of switchgear in Canada. The new "H-3" breaker was designed in Canada and is manufactured at the Bramalea, Ontario Plant. It incorporates the latest innovations in solid state control. Already these breakers have gained wide acceptance in Canada, the United States and in other major international markets.

Air circuit breakers are used in the manufacture of switchgear assemblies to provide reliability and flexibility in the protection and control of utility, industrial, commercial, institutional and marine power electrical distribution systems. In order to prevent extensive damage and reduce hazards to any section of an electric power system that becomes subject to a fault it must be disconnected from its power source as quickly as possible. The "H-3" air circuit breaker detects such faults and disconnects the circuit in less than 35 thousandths of a second. This is achieved by a combination of solid state electronics for the control function and high-power circuit interrupters—both fields in which Federal Pioneer has significant expertise.

Because of the critical nature of the function of circuit breakers, users place great emphasis on the reliability of the product and experience of the manufacturer. The history of Federal Pioneer's air circuit breaker manufacture dates back to the late 1930's when the small west coast firm Cemco Electrical Manufacturing Company Limited decided to expand its range of products to include them. Highlights of the intervening years include:

**1938:** The design of the Corporation's first air circuit breaker for incorporation into the open switchboards used at that time was completed. This 1,600 Amp. 600 Volt model used laminated copper butt-type contacts. The use of butt-type contacts has been employed in all of its successors including the new "H-3" design. The engineer responsible for this new design was a then recent graduate of the University of

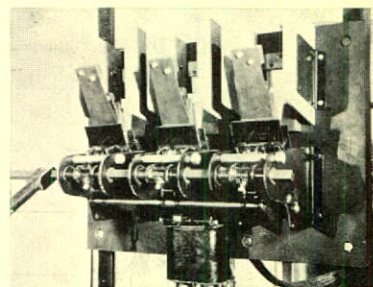


British Columbia, Anatole J. (Tony) Goodwin, the father of Federal Pioneer air circuit breakers.

**1940-1945:** In response to the urgent need for wartime products Cemco complied with a British Admiralty request to design and manufacture a 600 Amp, 2 pole 250 Volt DC breaker. In order to prove its ability to endure the rigors of wartime service this breaker was to be energized and then subjected to 2,000 ft.-lbs. shocks from three directions and 180° Fahrenheit temperatures. Whilst undergoing these tests the breaker was not to inadvertently close if it was open, or open if carrying current—the Cemco breaker met all of these requirements.

**1946-1955:** A complete line of air circuit breakers was developed using the principles developed in the shockproof Admiralty design. The range was extended from 600 Amps up through 6,000 Amps.

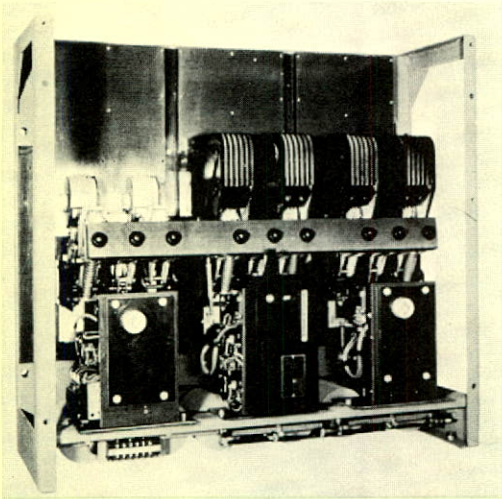
**1956:** A revolutionary development in circuit protection brought about the combination of high rupturing capacity fuses with the operating mechanism, arc chutes and contact structure of the air circuit breaker. This led to the development of the "Fusematic" breaker which offered a combination of the best features of fuses and breakers. The "Fusematic" had a



1 Air circuit breakers are the "heart" of custom low voltage switchgear.

2 1938—The first Cemco breaker, rated 1,600 Amp., 600 Volt.





3

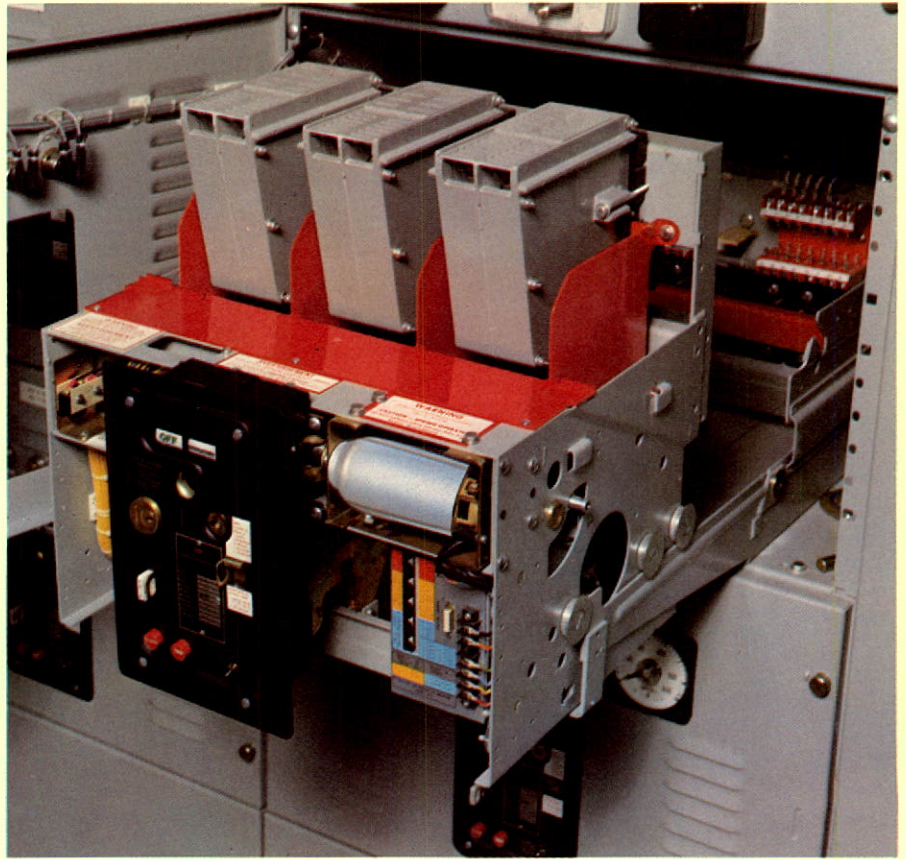


4

100,000 Amp. interrupting capacity, and filled a need which no competitive device could then satisfy. It was widely used as a starter for large motors employed in the British Columbia forest products industry and many such installations remain in service to this day.

1959-1967: The type "H1" breaker was designed, refining the type "H" and broadening the served market to include all of Canada.

1968-1981: The breakers were further developed and the new "H2" breaker was introduced offering increased interrupting ratings and, for the first time, included a new development—the solid state over-current relay. The increased accuracy and reliability of this relay quickly rendered its electro-mechanical predecessors obsolete. Market acceptance increased and Federal Pioneer became a market leader



5

in the design of low voltage breakers and switchgear. The new "H2" breakers also gained acceptance in international markets including the United States.

1981-1982: Your Corporation's engineers and designers—including Anatole Goodwin, who had been involved in the first design back in the late 1930's—developed the new "H-3" air circuit breaker and its integrally-fused version the "HL-3". These breakers incorporate the new solid state relay, the USD, which provides protection through overcurrent, and ground fault sensitivity. Protection of electrical systems and co-ordination to limit the effect of power outages are optimized with the ZSIP (Zone Selective Instantaneous Protection) function. The new "H-3" breaker now carries U.L. (Underwriters' Laboratories) and ASTA (The Association of Short-Circuit Testing Authorities) certification and is used in Canada, the United States, the United Kingdom and around the world.

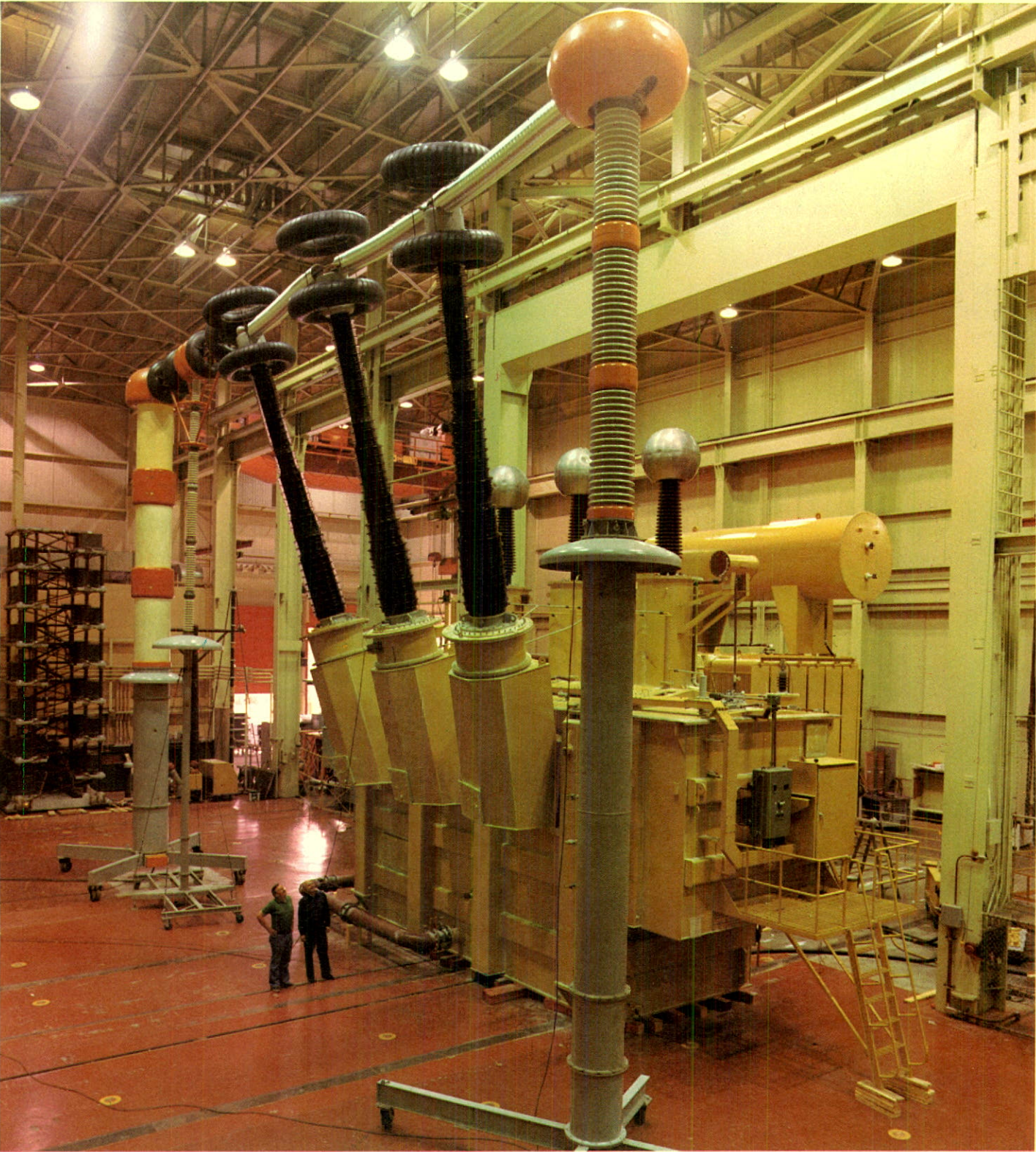
3 1956—A 4,000 Amp., type "H" breaker.

4 1942—Admiralty breaker undergoing qualification tests.

5 1982—The drawout mounting of this "H-3" breaker allows maintenance with minimum power outage time.



HVDC converter transformers





## HVDC converter transformers

---

During 1982 your Corporation shipped the largest transformer ever built in its Winnipeg Plant. The unit, shown opposite, is a 500kV DC converter transformer for Phase 2 Bi Pole II, of Manitoba Hydro's Nelson River HVDC (High Voltage Direct Current) system. This transformer, with a capacity rating of 262MVA, is amongst the largest converter transformers built anywhere in the world. Fully assembled, the unit weighs over 800,000 lbs. (365,000 kilograms) and contains some 30,000 gallons (132,000 litres) of mineral oil. The transformer, with radiators and accessories removed for shipment, weighed in excess of 440,000 lbs. (200,000 kilograms) and required a special 12 axle rail car for shipment. The unit is rated for DC voltage levels of 500kV and during testing was subjected to DC voltages in excess of 1,000,000 volts to prove its electrical capabilities. The completion and successful testing of this complex transformer served to firmly establish your Corporation as one of the world's very few manufacturers of HVDC converter transformers up to the highest power and voltage levels.

Most electrical systems in the world utilize AC (Alternating Current) because of the ease of transforming voltages to levels that can be used directly. DC (Direct Current) systems, on the other hand, offer certain advantages for the transmission of power over long distances and for strengthening weak systems without increasing system fault levels. DC also permits the inter-connection of non-synchronized AC systems.

For the transmission of power over long distances, AC is converted to DC at the sending end of the transmission line then reconverted to AC at the receiving end for utilization. While the cost of conversion equipment is considerable, it is more than compensated by the reduced transmission line costs, reduced right of way requirements and the lower transmission line losses associated with long transmission distances.

For the inter-connection of two non-synchronized utility systems, the AC of one system is converted to DC and then immediately converted back to the AC of the other system. This allows for the transfer of power without potentially harmful system interaction. These so called back-to-back conversion schemes are becoming more popular as Canadian utilities with excess generating capacity look for a safe and reliable method of inter-connecting to energy deficient utilities.

The first major DC application was an under-water cable system installed in Sweden in the 1950's. Since then, DC installations have been made in many countries around the world. Initially, the growth of DC installations was slow due to the high cost and low reliability of conversion equipment. With the advent of solid state thyristor conversion equipment, reliability has improved and costs have dropped. A period of high market growth has begun and there is significant market potential for HVDC applications in the future.

To date, your Corporation has shipped over 40 HVDC converter transformers including both single phase and three phase units rated to the highest power and voltage levels. Transformers have been provided for the Manitoba Hydro Nelson River transmission line, and for the Hydro Quebec Chateau Gai intertie. Engineering and manufacturing personnel have gained valuable expertise in the design, manufacture and application of HVDC converter transformers. Technically advanced units such as these serve to broaden your Corporation's technical and experience base, and provide knowledge that can be utilized in other transformer designs.

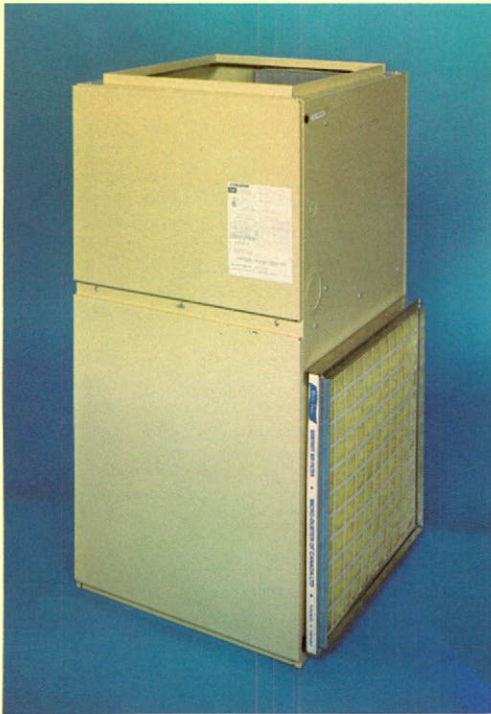
Continuing research and development ensures continued product leadership in the design, manufacture and application of converter transformers. Your Corporation also co-sponsors the HVDC Research Centre at the University of Manitoba, in co-operation with Manitoba Hydro, Teshmont Consultants, the Province of Manitoba and the University. The centre provides full research and development services for all applications of high voltage direct current transmission.

Recent improvements to the Winnipeg test department make possible the testing of HVDC converter transformers in what is possibly the best environment in the industry. The expertise of the test personnel and the sophistication of the equipment used allow for accurate and reliable testing which guarantees performance from the units produced.

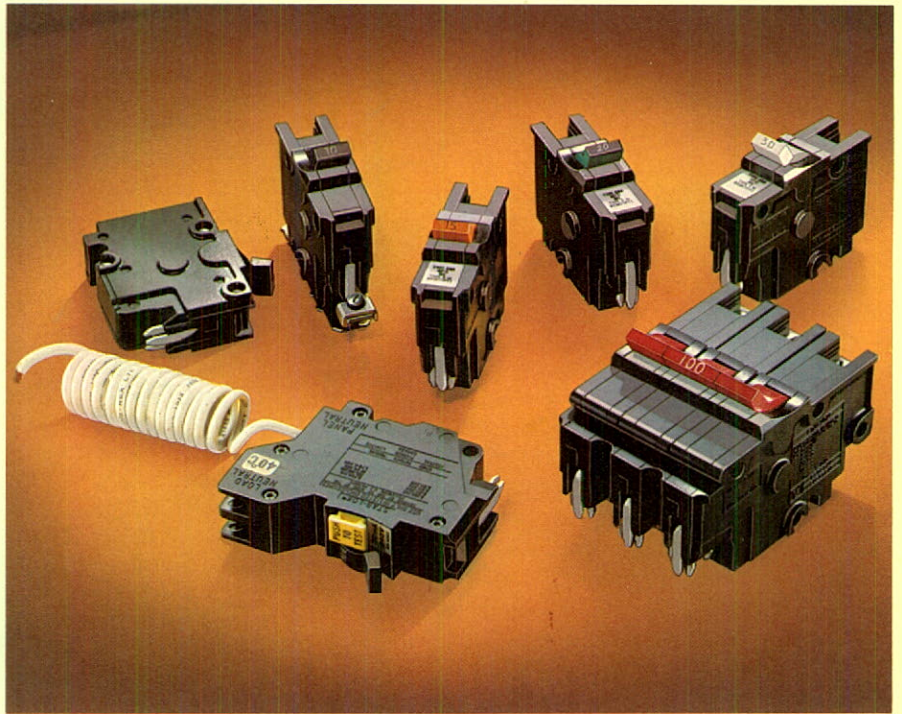
The future market potential for HVDC, and consequently for the converter transformers required, is very bright. As new techniques bring the cost of DC conversion down, it is likely that more applications will be identified. The experience base and successful product record identifies your Corporation as a major supplier of the converter transformers that will be needed in the future.



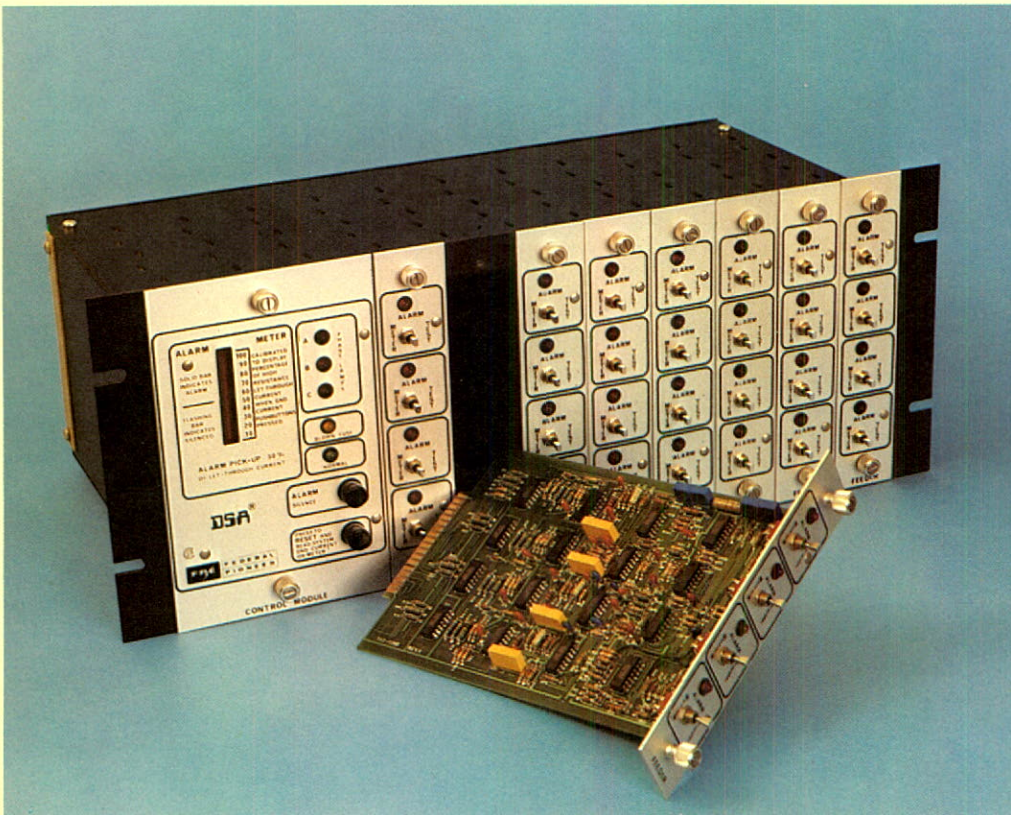
## Products



1



2



3



4

- 1 The Chaudair electric furnace is available with various kilowatt ratings and is manufactured at the Waterman Avenue, Toronto plant.
- 2 Federal Electric Limited is the only manufacturer in the United Kingdom to offer all four types of miniature circuit breakers that are interchangeable in one Distribution Board and designed to meet the Institute of Electrical Engineers 15th Edition of the Wiring Regulations.
- 3 This Delta System Alarm electronic relay is for use on ungrounded and high resistance grounded systems. It will indicate on which phase and feeder any ground fault has occurred.
- 4 The recently introduced CS dry-type distribution transformers are manufactured in sizes from 15 KVA to 45 KVA at the Horner Avenue, Toronto plant.



## Benjamin W. Ball, 1912-1982

---

Ben Ball was a native of Toronto and graduated from its University with a Bachelor of Arts degree in 1934. His first employment was with The Hudson Bay Company where he remained until 1942.

He started his long and distinguished career in the Canadian electrical industry in 1942 when he joined Cemco, a small Vancouver based electrical manufacturer, which in 1959 became part of Federal Pioneer Limited. He served Federal Pioneer and the electrical industry for forty years until his untimely death on October 7, 1982.

He was first appointed to the Board of Directors of Federal Pioneer Limited in 1964 and saw his Company grow in size and stature until, under his guidance, it became a leading member of the Canadian electrical industry with plants and offices from coast-to-coast. Mr. Ball also encouraged the Company to expand into international markets where it today enjoys a growing reputation for its products.

Mr. Ball was very well known and highly regarded within the electrical industry generally. In 1973/74 he served as President of the Canadian Electrical Manufacturers Association and was a member of many industry and government committees throughout much of his career.

In his private life Mr. Ball took great pride and pleasure in his family. He was an active member of the United Church and served in various capacities with the United Way of Greater Toronto as well as being a director of the Toronto French School. His colleagues and friends will sorely miss his companionship, humour, vitality and leadership.



*Benjamin Walker Ball, 1912—1982  
President and Chief Executive Officer*



# Federal Pioneer Limited

## Consolidated statement of income and retained earnings

Year ended December 31	1982	1981
Net sales	<b>\$188,133,880</b>	\$169,514,963
Income before the undernoted items	<b>\$ 22,969,365</b>	\$ 19,802,043
Add: Interest income	<b>1,311,652</b>	2,265,293
	<b>24,281,017</b>	22,067,336
Deduct:		
Depreciation and amortization	<b>2,994,950</b>	2,675,978
Interest on long-term debt	<b>315,659</b>	424,709
Other interest	<b>337,699</b>	441,882
	<b>3,648,308</b>	3,542,569
Income before income taxes and extraordinary item	<b>20,632,709</b>	18,524,767
Income taxes:		
Current	<b>8,799,974</b>	8,372,644
Deferred	<b>(406,000)</b>	(57,188)
	<b>8,393,974</b>	8,315,456
Income before extraordinary item	<b>12,238,735</b>	10,209,311
Extraordinary item less related income taxes	<b>—</b>	378,435
Net income for the year	<b>12,238,735</b>	9,830,876
Retained earnings at beginning of year	<b>70,169,396</b>	62,427,988
	<b>82,408,131</b>	72,258,864
Deduct:		
Dividends declared—\$2.00 per share (1981—\$1.70)	<b>2,458,198</b>	2,089,468
Retained earnings at end of year	<b>\$ 79,949,933</b>	\$ 70,169,396
Earnings before extraordinary item per share	<b>\$9.96</b>	\$8.31
Earnings after extraordinary item per share	<b>\$9.96</b>	\$8.00

### Auditors' Report

To the Shareholders of  
Federal Pioneer Limited:

We have examined the consolidated balance sheet of Federal Pioneer Limited as at December 31, 1982 and the consolidated statements of income and retained earnings and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position

of the Corporation as at December 31, 1982 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

*Pricewaterhouse*  
Chartered Accountants

Toronto, Ontario  
January 28, 1983




# Federal Pioneer Limited

## Consolidated balance sheet

December 31	1982	1981
<b>Assets</b>		
Current assets:		
Cash	\$ 1,027,071	\$ 43,519
Short-term deposits	17,000,000	13,500,000
Accounts receivable (Note 13)	32,204,809	28,152,081
Inventories (Note 3)	48,112,419	49,162,224
Prepaid expenses and deposits	476,630	454,122
	<b>98,820,929</b>	91,311,946
Fixed assets (Note 4)	22,027,637	19,010,495
Goodwill (Note 2)	1,506,536	1,585,828
	<b>\$122,355,102</b>	\$111,908,269
<b>Liabilities</b>		
Current liabilities:		
Bank indebtedness (Note 5)	\$ 2,406,496	\$ 3,273,476
Accounts payable and accrued liabilities (Note 13)	21,395,561	21,118,804
Income and other taxes payable	2,783,671	3,933,125
Dividend payable	614,550	553,095
	<b>27,200,278</b>	28,878,500
Long-term debt (Note 6)	6,446,359	3,695,841
Deferred income taxes	1,663,000	2,069,000
<b>Shareholders' Equity</b>		
Share capital (Note 7)	7,095,532	7,095,532
Retained earnings	79,949,933	70,169,396
	<b>87,045,465</b>	77,264,928
	<b>\$122,355,102</b>	\$111,908,269

Contingent liability (Note 12)

The financial statements have been approved  
by the Board of Directors

  
Director

  
Director



# Federal Pioneer Limited

## Consolidated statement of changes in financial position

Year ended December 31	1982	1981
Source of working capital:		
Income for the year before extraordinary item	<b>\$12,238,735</b>	\$10,209,311
Items not requiring working capital—		
Depreciation and amortization	<b>2,994,950</b>	2,675,978
Deferred income taxes	<b>(406,000)</b>	(57,188)
Working capital provided from operations	<b>14,827,685</b>	12,828,101
Disposals of fixed assets	<b>44,677</b>	19,459
Increase in long-term debt	<b>3,250,000</b>	—
	<b>18,122,362</b>	12,847,560
Use of working capital:		
Fixed asset additions	<b>5,977,477</b>	4,376,944
Dividends	<b>2,458,198</b>	2,089,468
Reduction in long-term debt	<b>499,482</b>	646,366
Extraordinary item	<b>—</b>	378,435
	<b>8,935,157</b>	7,491,213
Increase in working capital	<b>9,187,205</b>	5,356,347
Working capital at beginning of year	<b>62,433,446</b>	57,077,099
Working capital at end of year	<b>\$71,620,651</b>	\$62,433,446
Working capital is represented by:		
Current assets	<b>\$98,820,929</b>	\$91,311,946
Less: Current liabilities	<b>27,200,278</b>	28,878,500
	<b>\$71,620,651</b>	\$62,433,446



## Notes to consolidated financial statements December 31, 1982

### 1. Nature of business:

The Corporation is engaged in the manufacture and sale of equipment used in the control and distribution of electrical energy. The directors have determined that such business represents a single class of business. One subsidiary operates a plant in Great Britain. Its sales, assets and net income represented less than 10% of those of the Group. Export sales in 1982 from Canadian operations accounted for less than 10% of the total sales.

### 2. Significant accounting policies:

The accounting policies of the Corporation are in accordance with generally accepted accounting principles in Canada. The more significant policies are stated below:

#### Basis of consolidation—

The consolidated financial statements include the financial statements of Federal Pioneer Limited and all of its subsidiary companies.

#### Translation of foreign currencies—

Transactions in foreign currencies are translated at the approximate rate of exchange at the time of the transaction. Current assets and liabilities are translated at the exchange rates prevailing at the balance sheet date.

With regard to the foreign subsidiary, fixed assets, inventories, prepaid expenses, retained earnings and depreciation expense are translated into Canadian dollars at the appropriate historical exchange rates while other current assets and all liabilities are translated at the exchange rate prevailing at the balance sheet date. Revenue and expenses (other than depreciation) are translated at the average exchange rate for the year.

Unrealized gains or losses arising from the translation of long-term debt are deferred and amortized over the remaining life of the debt. Other exchange gains and losses are included in income.

#### Inventories—

Raw material inventories are valued at the lower of cost and replacement cost while work in process and finished goods are valued at the lower of cost and net realizable value, cost being determined generally by the first-in, first-out (FIFO) method but with certain inventories being valued on an 'average' basis.

#### Fixed assets—

Fixed assets are stated at cost. Expenditures on major replacements, extensions and improvements are capitalized. Cost of maintenance, repairs and renewals or replacements other than those of a major nature are charged to expense as incurred. The Corporation generally provides for depreciation using the diminishing balance method applying rates which will reduce the original cost to the estimated residual value over the useful lives of the assets. The annual rates

used are 5%—10% for buildings, 20% for machinery and equipment and 30% for computer equipment. Moulds, jigs and dies are fully depreciated in the year in which they are first used.

#### Goodwill—

Goodwill, which represents the excess of cost of shares of subsidiaries over net book value at dates of acquisition, is being amortized over a period of twenty years on a straight-line basis, commencing in 1982.

#### Income taxes—

Income taxes are accounted for on the tax allocation basis. The major portion of accumulated deferred income taxes arises from differences between the amounts of depreciation claimed for income tax purposes and those recorded in the financial statements.

### 3. Inventories:

	December 31	
	1982	1981
Raw material and work in process	\$42,289,728	\$46,633,419
Finished goods	8,124,294	6,310,802
	<u>50,414,022</u>	<u>52,944,221</u>
Less: Progress payments	(2,301,603)	(3,781,997)
	<u>\$48,112,419</u>	<u>\$49,162,224</u>

### 4. Fixed assets:

	December 31	
	1982	1981
Cost—		
Land	\$ 1,074,413	\$ 466,643
Buildings	17,980,887	15,240,363
Machinery and equipment	25,795,921	23,470,718
	<u>44,851,221</u>	<u>39,177,724</u>
Accumulated depreciation—		
Buildings	5,809,866	5,114,927
Machinery and equipment	17,013,718	15,052,302
	<u>22,823,584</u>	<u>20,167,229</u>
Net book value—		
Land	1,074,413	466,643
Buildings	12,171,021	10,125,436
Machinery and equipment	8,782,203	8,418,416
	<u>\$22,027,637</u>	<u>\$19,010,495</u>

### 5. Bank indebtedness:

Bank indebtedness of the foreign subsidiary amounting to \$2,747,745 (1981—\$3,219,092) is secured by a floating charge on all of its assets. Of this sum \$341,249 (1981—\$584,280) is payable after one year and is included as a long-term debt.



## Notes to consolidated financial statements—continued

### 6. Long-term debt:

	December 31	
	1982	1981
6¾% secured sinking fund debentures, Series A, maturing April 15, 1987, with annual sinking fund payments of \$218,000 in 1983 and thereafter gradually increasing to \$267,000 in 1986. The balance of \$1,505,000 is repayable at maturity	\$ 2,474,000	\$ 2,678,000
10% mortgage loan repayable in monthly instalments maturing in 1990	470,927	489,275
8.46% mortgage loan repayable in four equal instalments in 1985	3,250,000	—
6¾% mortgage loan repayable in monthly instalments maturing in 1989	168,226	185,278
8¾% chattel mortgage loan of a subsidiary	—	7,966
Bank loan of the foreign subsidiary of £ 257,142 (1981—£342,858) repayable in equal half-yearly instalments by 1985 with interest at 1¾% above the base rate secured by a floating charge on all of its assets	511,871	779,040
	<u>6,875,024</u>	<u>4,139,559</u>
Amount payable within one year included in current liabilities	428,665	443,718
Amount payable after one year	<u>\$ 6,446,359</u>	<u>\$ 3,695,841</u>

The aggregate amount of long-term debt required to be repaid in each of the next five years is:

1983	\$ 428,665
1984	448,098
1985	3,717,843
1986	318,290
1987	1,560,728
	<u>\$6,473,624</u>

The 6¾% secured sinking fund debentures, Series A, are secured by a Deed of Trust and Mortgage which, inter alia, provides for dividend restrictions under certain conditions. The financial position of the Corporation is such that these restrictions are not applicable at this time.

### 7. Share capital:

The Corporation is authorized to issue an unlimited number of common shares without nominal or par value. At December 31, 1982 there were issued and outstanding 1,229,099 common shares without nominal or par value with a stated value of \$7,095,532. These amounts remained the same throughout the year.

### 8. Research and development costs:

Research and development costs incurred during the year and charged to expense amounted to \$1,413,143 (1981—\$999,960). No costs qualified for deferral.

### 9. Long-term leases:

The Corporation leases plants, warehouses and sales offices in Canada and Great Britain. All of these leases are treated as operating leases with the rents charged to operations in the year to which they relate. No significant leases have been entered into since January 1, 1979 which meet the definitions of a capital lease.

The longest term of any lease expires in 2002. The aggregate rentals payable for the unexpired terms of these leases are as under:

1983	\$ 421,000
1984	403,000
1985	379,000
1986	308,000
1987	213,000
thereafter	<u>2,462,000</u>
	<u>\$4,186,000</u>

### 10. Unfunded pension costs:

Current service costs of the Corporation's various pension plans are funded and charged to operations as they accrue. Based upon estimates by independent actuaries, unfunded past service pension costs at December 31, 1982 amounted to \$726,000 (1981—\$1,308,000) of which approximately \$503,000 (1981—\$393,000) related to vested past service benefits. Annual payments of \$61,000 (1981—\$283,000) charged to operations are designed to fund this total unfunded liability, including interest, by 2001.

### 11. Capital commitments:

The Corporation has entered into capital commitments as at December 31, 1982 for expenditures on land, machinery and moulds amounting to \$1,472,775 (1981—\$946,000).

### 12. Contingent liability:

In 1976 an accidental spill of transformer oil containing polychlorinated biphenyls occurred at the Corporation's Regina plant. The Corporation, in co-operation with environmental authorities, has taken steps to contain the spill and is monitoring the results thereof. At this time the need for, or nature of, any further action or cost which might be required in the longer term cannot be determined.

### 13. Related party transactions:

The parent company, Federal Pacific Electric Company of Newark, New Jersey, U.S.A. is the registered holder of 59.3% of the issued and outstanding common shares of the Corporation. Under the terms of a licence the Corporation pays a royalty to the parent for the use of patents, trademarks and the supply of technical knowhow. The royalty is based upon a percentage of the sales value of specified products and during the year amounted to \$702,000 (1981—\$646,000). In addition the Corporation supplies products to the parent and purchases components from it. The value of such purchases and sales is less than 10% of the aggregate. Accounts receivable at December 31, 1982 includes \$744,682 (1981—\$191,764) due from affiliated companies. Accounts payable and accrued liabilities at December 31, 1982 includes \$18,085 (1981—\$195,191) due to affiliated companies.



## Five year summary

Year ended December 31	1982	1981	*1980	*1979	1978
Net sales	<b>\$188,133,880</b>	\$169,514,963	\$153,102,225	\$121,882,286	\$112,617,341
Income before income taxes, minority interests and extraordinary item	<b>20,632,709</b>	18,524,767	17,296,526	6,724,533	11,566,812
Income taxes	<b>8,393,974</b>	8,315,456	6,939,374	1,840,710	4,567,089
Income before extraordinary item	<b>12,238,735</b>	10,209,311	10,357,152	4,893,374	7,027,738
Net income for the year	<b>12,238,735</b>	9,830,876	9,665,152	4,893,374	7,027,738
Net income before extraordinary item per sales dollar (cents)	<b>6.5</b>	6.0	6.8	4.0	6.2
Earnings per common share before extraordinary item:					
Undiluted	<b>9.96</b>	8.31	8.43	3.98	5.76
Fully diluted	<b>9.96</b>	8.31	8.43	3.98	5.71
Dividends declared:					
First Preference shares	—	—	—	319	4,803
†Common shares	<b>2,458,198</b>	2,089,468	1,253,680	1,081,607	1,056,469
Class B shares	—	—	—	—	19,807
Total	<b>2,458,198</b>	2,089,468	1,253,680	1,081,926	1,081,079
Dividends per share:					
First Preference shares	—	—	—	1.37½	2.75
†Common shares	<b>2.00</b>	1.70	1.02	0.88	0.88
Class B shares	—	—	—	—	0.88
Property, plant and equipment—at cost	<b>44,851,221</b>	39,177,724	34,983,768	28,414,444	24,771,098
—net	<b>22,027,637</b>	19,010,495	17,328,988	12,689,560	10,798,095
Purchases of property, plant and equipment during the year	<b>5,977,477</b>	4,376,944	7,221,901	3,892,447	1,997,131
Depreciation and amortization provided for the year	<b>2,994,950</b>	2,675,978	2,535,128	1,940,248	1,602,388
Working capital at end of year	<b>71,620,651</b>	62,433,446	57,077,099	53,404,916	52,775,795
Long-term debt at end of year	<b>6,446,359</b>	3,695,841	4,342,207	4,703,039	5,022,397
Shareholders' equity at end of year	<b>87,045,465</b>	77,264,928	69,523,520	61,112,048	57,312,200
Number of shares outstanding at end of year:					
First Preference shares	—	—	—	—	904
†Common shares	<b>1,229,099</b>	1,229,099	1,229,099	1,229,099	1,203,903
Class B shares	—	—	—	—	22,508
Equity per common share at end of year after allowing for conversion of any outstanding First Preference shares	<b>70.82</b>	62.86	56.56	49.72	46.59

\*Figures for the year 1979 consist of the ten months ended October 31 1979 as audited, plus two months ended December 31 1979 unaudited. Figures for the year 1980 consist of the fourteen months ended December 31 1980 as audited, less two months ended December 31 1979 unaudited.

†Class A shares prior to December 31 1980.



## Directors

As at February 17, 1983

\***John B. Clements, Q.C.**, Toronto  
Partner, Lash, Johnston (barristers and solicitors)

†\***A. Gordon Daley**, Toronto  
President and Chief Executive Officer of the Corporation

†\***W. Douglas H. Gardiner**, Vancouver  
Financial Consultant

†**William B. Korb**, South Bend, Indiana, U.S.A.  
Group Vice-President of Reliance Electric Company

**Emory G. Orahood, Jr.**, Atlanta, Georgia, U.S.A.  
Executive Vice-President and Chief Operating Officer of Reliance Electric Company

\***Pauline Ouimet**, Montreal  
President of Les Chefs Volants Inc.

†\***Venceslas Sirois**, Toronto  
Consultant

\*Member of the Audit Committee  
†Member of the Compensation Committee

## Officers

As at February 17, 1983

**William B. Korb**, South Bend, Indiana, U.S.A.  
Chairman of the Board

**A. Gordon Daley**, Toronto  
President and Chief Executive Officer

**Bernard J. Ferreira**, Toronto  
Senior Vice-President and General Manager—Distribution Division

**Edward C. Markwick**, Toronto  
Senior Vice-President Finance and Secretary

**Stanley M. Roberts**, Toronto  
Senior Vice-President and General Manager—Distribution and Small Power Transformer Division

**Kenneth J. Thompson**, Toronto  
Senior Vice-President Marketing

**Douglas V. Baldwin**, Toronto  
Vice-President and Manager Marketing Services

**Ellis Hughes**, Winnipeg  
Vice-President and General Manager—Winnipeg Plant

**Colin A. A. MacPhee**, Toronto  
Vice-President and Engineering Manager—Distribution Products

**John E. Outram**, Toronto  
Vice-President and Engineering Manager—Engineered Products

**Paul N. Taylor**, Toronto  
Vice-President and Manager—Waterman and Markham Plants

**Edward A. Atkinson**, Toronto  
Comptroller and an Assistant Secretary

**James H. Taylor**, Winnipeg  
An Assistant Secretary

## Corporate Information

### Registered Office:

19 Waterman Avenue  
Toronto, Ontario, M4B 1Y2  
Telex 06 963724 Phone 416-752-8020

### Parent Company:

Federal Pacific Electric Company  
Newark, New Jersey, U.S.A.

### Subsidiary Companies:

	Percentage of voting securities owned
Federal Electric Limited Wolverhampton, England	100
*Federal Pioneer Eastech Limited Truro, Nova Scotia	100
La Compagnie Électrique Pioneer du Québec, Inc. Granby, Quebec	100

\*Dissolved as of December 31, 1982.

### Share Listing:

Common shares—The Toronto Stock Exchange—symbol FPE

### Registrars and Transfer Agents:

Common shares—National Trust Company, Limited, Toronto and Montreal

6¾% secured sinking fund debentures,  
Series A—The Canada Trust Company, Toronto, Montreal, Winnipeg and Vancouver

### Trustees for the Debenture Holders:

The Canada Trust Company, Toronto

### Auditors:

Price Waterhouse, Toronto

### Bankers:

The Canadian Imperial Bank of Commerce,  
Toronto and London, England



## Sales Offices

---

### Canada

#### *Atlantic District*

F. W. Bailey, District Sales Manager  
1000 Windmill Road, Suite 12  
Dartmouth, Nova Scotia B3B 1L7  
Telex 019 31598 Phone 902-465-2157

136 Gordon Street  
Box 2698  
Moncton, New Brunswick E1G 8T8  
Phone 506-389-3085

#### *Quebec District*

W. E. Ferris, District Sales Manager  
3300 Cavendish Boulevard  
Suite 275  
Montreal, Quebec H4B 2M8  
Telex 05 267632 Phone 514-482-9600  
2900 Quatre Bourgeois Street  
Suite 202  
Ste-Foy, Quebec G1V 1Y4  
Telex 051 31653 Phone 418-653-8825

P.O. Box 550  
561 Maisonneuve Street  
Granby, Quebec J2G 3H5  
Telex 05 832513 Phone 514-378-9025  
2668 Alta Vista Drive  
Suite 205  
Ottawa, Ontario K1V 7T4  
Phone 613-737-5178

#### *Ontario District*

L. S. Smith, District Sales Manager  
255 Orenda Road  
Bramalea, Ontario L6T 1E6  
Telex 06 97509 Phone 416-459-8805  
3 Bellevue Crescent  
North Bay, Ontario P1B 8V2  
Phone 705-476-1466  
2445 Industrial Street  
P.O. Box 353  
Burlington, Ontario L7P 3E1  
Telex 061 8404 Phone 416-335-1222

20 Pintail Drive  
Elmira, Ontario N3B 3C4  
Phone 519-669-1771  
425 Dundas Street  
Suite 202  
London, Ontario N6B 1V9  
Telex 064 5806 Phone 519-433-8441

#### *Mid-West District*

P. T. Wicks, District Sales Manager  
1255 Clarence Avenue  
Winnipeg, Manitoba R3T 1T4  
Telex 07 55436 Phone 204-453-4840  
P.O. Box 336, 1600 First Avenue  
Regina, Saskatchewan S4P 3A1  
Telex 071 2250 Phone 306-525-3351  
3754 Fairlight Drive  
Saskatoon, Saskatchewan S7M 4K1  
Phone 306-384-6626

#### *Alberta District*

J. F. Cozens, District Sales Manager  
3844—8th Street S.E.  
Calgary, Alberta T2G 3A8  
Telex 03 821636 Phone 403-243-8890  
P.O. Box 3971  
12019—160 Street  
Edmonton, Alberta T5L 4K1  
Telex 037 2524 Phone 403-452-9971

#### *Pacific District*

J. B. Howell, District Sales Manager  
2551 Viking Way  
Richmond, British Columbia V6V 1N4  
Telex 043 55505 Phone 604-273-3711  
1417 Naish Drive  
Penticton, British Columbia V2A 3B7  
Telex 048 88163 Phone 604-493-2840

#### *Exports*

H. Kroeker, Manager Export Sales  
19 Waterman Avenue  
Toronto, Ontario M4B 1Y2  
Telex 06 963724 Phone 416-752-8020

### United Kingdom

B. W. Peter, Marketing Director  
Federal Electric Limited  
Fordhouse Road  
Wolverhampton WV10 9ED England  
Telex 51339828 Phone 0902-732521

## Plants

---

### Canada

P.O. Box 700, Willow Street  
Truro, Nova Scotia B2N 5E5  
P. E. Hynes, Plant Manager  
P.O. Box 550  
561 Maisonneuve Street  
Granby, Quebec J2G 3H5  
R. Babineau, Plant Manager  
P.O. Box 272, Bernard Road  
Granby, Quebec J2G 8E5  
S. G. Watt, Plant Manager  
19 Waterman Avenue  
Toronto, Ontario M4B 1Y2  
P. N. Taylor, Plant Manager  
445 Horner Avenue  
Toronto, Ontario M8W 2A7  
S. G. Watt, Plant Manager  
255 Orenda Road  
Bramalea, Ontario L6T 1E6  
T. J. Rowlands, Plant Manager

160 Bullock Drive  
Markham, Ontario L3P 1W2  
R. B. Murray, Plant Manager  
101 Rockman Street  
Winnipeg, Manitoba R3T 0L7  
E. Hughes, Plant Manager  
P.O. Box 550, 914 Douglas Street  
Brandon, Manitoba R7A 5Z7  
P. T. Burns, Plant Manager  
P.O. Box 336, 1600 First Avenue  
Regina, Saskatchewan S4P 3A1  
K. G. Booth, Plant Manager  
P.O. Box 738, 5727—53A Avenue  
Red Deer, Alberta T4N 5H2  
K. G. Booth, Plant Manager  
2551 Viking Way  
Richmond, British Columbia  
V6V 1N4  
M. Moloney, Plant Manager

### United Kingdom

Federal Electric Limited  
Fordhouse Road  
Wolverhampton WV10 9ED England  
I. K. P. Ross, Managing Director





FEDERAL PIONEER LIMITED