Eldorado Nuclear Limited

Annual Report 1980

The Company

Eldorado Nuclear Limited is a commercial federal Crown corporation, primarily engaged in the mining, refining and conversion of uranium fuel for the generation of electricity in Canada and other countries.

The Company also produces depleted uranium metal at Port Hope for radiological shielding and other applications.

The exploration division, research and development division and the head office are located in Ottawa.

The Company has two wholly-owned subsidiaries: Eldorado Aviation Limited services the mining division and Eldor Resources Limited is engaged in developing new uranium properties in northern Saskatchewan. Both are located in Saskatoon.

The economic objective of Eldorado Nuclear is to achieve and sustain a high level of profitability and to provide an attractive return on Company investments.

Eldorado Nuclear Limited and the Nuclear Fuel Cycle

Mining/Milling

Eldorado's Beaverlodge Operations, near Uranium City in northern Saskatchewan, mine uranium-bearing ore and mill it to produce uranium concentrates (U_3O_8) for markets in Canada and throughout the world.

Refining

Eldorado operates a uranium refinery at Port Hope, Ont. where uranium in concentrates received from Canadian and foreign mines is extracted to produce uranium trioxide (UO_3), a pure form of uranium.

Conversion

The Company also operates two uranium conversion plants at Port Hope, which convert the UO_3 into ceramic uranium dioxide powder (UO_2) used in CANDU heavy-water reactors and into uranium hexafluoride (UF_6), which is subsequently enriched and used in foreign light-water reactors.

Metallurgy

Eldorado produces depleted uranium metal, alloys and products, which are used for radiation shielding in the medical, nuclear and other industries. Metal produced at Port Hope is also used as counterweights in aircraft.

Highlights

Financial ($ in thousands)	1980	1979	1978
Sales	$ 91,116	$111,498	$124,046
Earnings before taxes and extraordinary item	$ 5,440	$ 6,093	$ 28,185
Net earnings	$ 1,506	$ 398	$ 17,618
Return on capital employed	0.5%	0.1%	7.8%
Capital expenditures	$ 53,949	$ 56,296	$ 38,196
Working capital (deficiency)	$ (8,310)	$ 18,376	$ 8,381
Long-term debt	$204,990	$183,093	$130,366
Shareholder's equity	$ 81,610	$ 80,104	$ 79,706
Production (in thousands)			
Uranium oxide (lbs. U_3O_8)	1,100	1,006	1,283
Uranium hexafluoride (lbs. U)	9,361	9,890	7,096
Uranium dioxide (lbs. U)	2,127	2,919	2,129
Employees at year end			
Total	1,737	1,610	1,499
Payroll and benefits ($ in thousands)	$ 47,906	$ 42,485	$ 31,645

Report to the Shareholder

The Honourable Marc Lalonde
P.C., Q.C., M.P.
Minister of Energy, Mines and Resources

Dear Sir:

On behalf of the Board of Directors, I hereby present the Annual Report of Eldorado Nuclear Limited and its wholly-owned subsidiaries, Eldorado Aviation Limited and Eldor Resources Limited, for the fiscal year ended 31 December, 1980.

Gross revenue from the sale of the Company's products and services amounted to $91,116,000 in 1980. This compares with $111,498,000 in 1979. The reduction was primarily the result of the cancellation negotiated by the Company of some 1980 deliveries of low-priced uranium mine concentrates.

Consolidated net earnings equalled $1,506,000, up from the $398,000 profit reported in 1979. The cancellations of the low-priced contracts allowed the Company to reverse the provision made in 1979 for a loss, which was expected to be incurred on these deliveries. The cancelled deliveries had an additional benefit in that the previously contracted material was used to repay a portion of Eldor Resources' outstanding loan of concentrates from Uranium Canada, Limited.

The cancellation and re-deployment of the concentrates resulted in a net gain of $9.2 million.

Eldorado is currently engaged in large, indeed record, capital expenditures for the development of new assets and the refurbishing of existing facilities. This comes at a time of a short-term reduction in demand for uranium concentrates, which has had a negative effect on profits.

Like Eldorado, resource industries generally have to anticipate market conditions well into the future when making development decisions. Unlike Eldorado, resource companies usually finance those developments at least in part with risk capital.

To the end of 1980, the Company's capital spending has been financed entirely by borrowing in private markets. Thus, Eldorado is burdened with much larger interest payments resulting from the expansion program than is normally the case for resource companies.

These circumstances will continue to reduce operating profits until the new facilities are brought into production in the period beyond 1983. However, substantial new cash flows are expected from the new production capacity.

In addition to the expansion program, Eldorado has made significant investments in rehabilitating its existing facilities. This program is beginning to improve the efficiency of aging production facilities and further progress is being made to maintain the Company's cost competitiveness with other uranium mining and refining companies.

Western Operations

The western operations of Eldorado consist of the Beaverlodge mine and mill near Uranium City, and the management and support services, which were relocated during the year from Edmonton to Saskatoon.

Mine/Mill

In 1980, ore milled at Beaverlodge increased three percent to 322,000 tons and the grade of ore rose slightly from 0.185 to 0.188 percent. The Dubyna property, which was brought into production late in 1979, contributed significantly to the higher production, offsetting declines from other areas of production. Nonetheless, the grade of ore mined continues to be below the average mine grade, largely because of the inability to carry out development work in recent years due to shortages of experienced miners. Development work was accelerated in the third quarter as labour availability improved and should allow access to higher grade ore in 1981.

The higher tonnage and grade, coupled with an increase in the mill recovery rate from 86.9 percent in 1979 to 88.6 percent, resulted in 1,100,000 pounds of uranium concentrates being produced, up nine percent from the 1979 production level.

As noted above, steps were taken to accelerate the development program at the mine, resulting in a 50 percent increase in drift development to 13,711 feet and an 18 percent increase in raise development to 5,006 feet.

Measured and indicated ore reserves at or above the 34th level were 3.6 million tons at a grade of 0.207 percent.

Further mine mechanization was achieved with five stopes using mechanized equipment by year-end, accounting for 25 percent of the ore broken during the year. The program has reduced the need for traditional mining skills and has resulted in a modest increase in overall productivity. Further improvements are expected with the completion of a ramp system below the 26th level. This development will permit more flexible use of the mechanized equipment.

In recent years, Eldorado has invested large sums of capital in housing and community services, and has developed new employee programs. These undertakings have been designed to increase the pool of trained and experienced personnel available to the division and to reduce the turnover among mine and mill employees.

As a result of the major housing program, including new construction and renovations, Eldorado now owns 580 modern units, providing employees with a quality of housing equal to or better than that found in other resource communities.

The purchase of the Boeing 737 jet by Eldorado Aviation Limited and the introduction of weekend flights to Saskatoon have made urban communities more accessible to Beaverlodge employees.

A commuter program was introduced to the northern communities of Stoney Rapids, Fond du Lac and Black Lake for native employees. These and other initiatives taken by the Company, with the support of the Saskatchewan government, have increased the number

Ore Mined (tons)

1980	317,000
1979	312,000
1978	307,000
1977	256,000
1976	196,000

U_3O_8 Production (pounds)

1980	1,100,000
1979	1,006,000
1978	1,283,000
1977	1,185,000
1976	1,188,000

of native employees from 55 at the end of 1979 to 84. Native training and employment programs, coupled with improved accommodation and the commuting service, have met with some success in reducing the high turnover.

Another initiative taken during 1980 was the introduction of women into operating areas of the workforce. A total of 39 women were hired in the mill and maintenance departments.

The net effect of the housing, transportation, and native and female employment programs has been positive. For the first time in several years, the Beaverlodge Operations ended the year with a full complement of personnel. Although the rate of turnover remains high and was increasing through most of 1980, there are now significant indications that this trend is being reversed. Eldorado is committed to assisting employees in enhancing their skills and career opportunities, and to ensuring that Uranium City is fully competitive with other resource communities in its ability to attract and retain a skilled workforce.

The $25 million Charlot River hydro project to generate electricity for Beaverlodge was completed on schedule and on budget. The project increases the Company's hydro generating capacity by 84 percent to 150 million kilowatt hours annually. The station was commissioned in March and officially opened on June 22 by the Honourable Jerry Hammersmith, Minister of the Department of Northern Saskatchewan.

The gross total generation of electricity from the Company's three hydro stations and diesel plant was 108.7 million kwh, eight percent higher than in 1979. Of this, 14.5 million kwh was from diesel generation. With completion of the Charlot River project, Eldorado's hydro capacity would normally be adequate to supply the electricity needs of the mine and mill, as well as the communities. However, the very low level of precipitation in northern areas in recent years has significantly reduced the amount of water available to the stations. At year-end, clearing of the existing water channels was under way to increase the water flow into the system and four diesel generators were in continuous use to conserve water.

Two collective labour agreements were completed during the year. A two-year agreement covering hourly employees was reached with Local 913 of the United Steelworkers of America, effective April 6, 1980. A 29-month agreement was reached with food service employees, effective January 27, 1980. Negotiations with USW Local 8684, covering first line supervisors, continued into 1981.

Support

The most significant developments affecting western operations during 1980 were the relocation of all mine support services and senior management from Edmonton to Saskatoon, and the establishment of jet passenger/freight service to the mine by Eldorado Aviation Limited.

Eldorado has a long association with Edmonton, dating back to the 1930s when the Company mined Canada's first radioactive ore deposit, the world-famous Port Radium property in the Northwest Territories. The Mackenzie River barge system and the early development of the aviation industry made Edmonton the logical staging area for supplying Port Radium and, since the early 1950s, Beaverlodge.

Eldorado's decision to purchase a Boeing 737 cargo-passenger jet to replace its aging fleet of propellor-driven aircraft facilitated the relocation of its western operations base to Saskatoon. A new hangar, warehouse and office facilities for Eldorado Aviation were built at the Saskatoon airport during 1980 at a cost of $2.7 million. The facilities were completed in less than six months and the division was relocated from Edmonton by the end of October.

Simultaneous with the aviation

move, Eldorado's management and support services were consolidated in new offices in Saskatoon. As a result, all purchasing, hiring, transportation, accounting, other support services and senior mine management are now located in that city, along with the regional exploration office. The move will mean significant economic benefits for the Saskatchewan economy and increased employment opportunities for residents of the province. It will also result in a closer association between other cities and towns in the province and Uranium City, one of Saskatchewan's oldest resource-based communities.

Several long-service employees in Edmonton chose early retirement rather than relocation. Eldorado Nuclear Limited appreciates their many years of dedicated service.

The three transportation systems employed by Eldorado continued to provide a vital service to the Beaverlodge Operations during 1980. The number of employee and contractor passengers flown by Eldorado Aviation was 18,943 while the volume of all cargo equalled 52.8 million pounds. Of the total volume of cargo, 24 percent was flown, 73 percent shipped by barge and three percent transported via Saskatchewan's winter road north across Lake Athabasca.

Refining/Conversion

Eldorado operates three processing plants at Port Hope for the production of uranium for ultimate use in nuclear reactors.

The refinery processes uranium concentrates delivered from mines in Canada and other countries, producing a pure form of uranium. This product is then fed into two different conversion plants. One plant converts the uranium into ceramic uranium dioxide powder (UO_2) for use in CANDU reactors operated by Canadian electrical utilities. The other plant converts the refinery product into uranium hexafluoride (UF_6), which is exported for enrichment and ultimately used in foreign light-water reactors.

The amount of uranium processed at the Port Hope facilities declined nine percent to 11.5 million pounds of uranium from the level achieved in 1979. Reduced UO_2 requirements of Canadian utilities accounted for most of the drop in production, although the amount of uranium converted into UO_2 and UF_6 was also constrained by production problems in the refinery during the year.

UF_6 produced for foreign utilities in 1980 contained 9.4 million pounds of uranium. Refinery production problems, which reduced the volume of feed material to the UF_6 conversion plant during the first and final quarters of the year, have been resolved. As a result, UF_6 output is expected to return to higher levels.

UO_2 production amounted to 2.1 million pounds of uranium in 1980. Reduced fuel requirements for Ontario Hydro's reactor expansion program accounted for most of the decline in production from 1979. Customer requirements are forecast to rise during the current year and no production constraints are anticipated. A new UO_2 circuit was commissioned during 1980.

A three-year collective labour agreement was negotiated with Local 13173 of the United Steelworkers of America, effective April 1, 1980. A union-management steering committee has developed a joint problem-solving program for implementation at all Port Hope facilities. Although still in its early stages of development, progress to date has been encouraging with work-study groups making significant contributions toward improving working relationships and safety programs.

Substantial progress was achieved during 1980 in reducing air emissions from both the refinery and the UF_6 conversion plant. Further improvements are planned in 1981 to continue reducing fluoride emissions. Environment-related expenditures accounted for approximately 18 percent of total capital spending at Port Hope.

Substantial progress was realized in 1980 in reducing the volume of waste from the Port Hope facilities requiring storage. Federal and provincial approvals were obtained during the year, permitting the recycling of the raffinate waste stream from the refinery to uranium mills in northern Ontario. The mills recover the sulphuric acid and traces of uranium in the raffinate. Ammonium nitrate waste from the UO_2 conversion process continues to find commercial and regulatory acceptance as a liquid fertilizer. An incinerator for low radioactive solid wastes was commissioned in 1980, significantly reducing the quantity of these wastes requiring burial.

Development programs are continuing to investigate the use of calcium fluoride waste from the UF_6 conversion process as a fluxing agent in the steel industry. The successful realization of this program would mean that virtually all waste streams from the processes employed in the production of reactor fuel material at Port Hope would be recycled for their economic value.

Eldorado continues to actively pursue this objective. It would represent a major achievement in resource processing and would be without parallel in the uranium industry in Canada or elsewhere.

Metallurgical

In addition to producing forms of uranium for ultimate use in electricity-generating reactors, Eldorado also operates a depleted uranium metal plant at Port Hope.

Sales of metallurgical products during 1980 amounted to a record $7.7 million, an increase of 45 percent over the previous year. A second vacuum casting furnace was brought on stream early in 1980, improving Eldorado's capability to produce large castings at competitive prices.

Because of its high density, depleted uranium metal is used as counterweights in the aerospace industry and as radiation shielding for reactors, radiotherapy units, radiographic cameras and radioisotope transport containers.

UF_6 Production (pounds U)

1980	9,361,000
1979	9,890,000
1978	7,096,000
1977	8,525,000
1976	7,331,000

UO_2 Production (pounds U)

1980	2,127,000
1979	2,919,000
1978	2,129,000
1977	1,855,000
1976	1,113,000

Although the depleted uranium metal market is not expected to maintain the high growth rate experienced in recent years, Eldorado is continuing to pursue new opportunities for high technology metals in North America and Europe.

Health and Safety

During the year, the Company continued to place a high priority on safe working practices and conditions. A consulting firm was engaged to conduct safety audits at Beaverlodge and Port Hope, thus guiding the divisions in the design and implementation of improved safety programs. Both divisions have strengthened their induction training programs for new employees, with the assistance of joint union/management safety committees.

The number of lost-time injuries, their severity and frequency were reduced during 1980. However, further reductions in the number of conventional industrial accidents remains an important corporate objective.

Radiation exposure levels for operating employees throughout the Company remained well below the acceptable levels established by regulatory agencies.

Among personnel at Beaverlodge, the mean total exposure to radon daughters, a product of decaying uranium, was 0.8 Working Level Months (WLM) in 1980 compared with the regulatory permissible level of 4.0 WLM per year. No employee exceeded the level.

At Port Hope, the average radiation exposure of personnel was 91 millirems compared with the 5,000 millirem limit for atomic radiation workers. The highest exposure for an individual employee was well below the limit.

Research and Development

The objective of the Research and Development Division is to develop continually improving technology for application to processes used by the Company.

At the Beaverlodge Operations, the division carried out research programs in 1980 which assisted in improving the milling operations, reducing soluble uranium losses and increasing the extraction of uranium from ore. Assistance in waste management included the reduction of water usage in the backfill plant, process development for radium removal from satellite mine water and the successful completion of a pilot plant study on the recovery of uranium from mine water.

Divisional activities also assisted in the production of UO_3, UO_2 and UF_6 at Port Hope. Technical support was provided in reducing air emissions and the volume of wastes, and in recycling process wastes for their commercial value. Assistance was also provided in commissioning the new UO_2 plant and in the UO_3 and UF_6 expansion program.

The division contributed to the design of the Key Lake waste management system, carried out studies in support of the Company's exploration efforts and provided analytical support to the joint government/industry program for the removal of radium from mill tailings.

Resource Base

Programs designed to expand Eldorado's resource base were continued during 1980, including exploration and participation in the development of the Key Lake orebodies.

Exploration

The Company participated in 33 exploration projects, 21 of them joint ventures with other companies, including domestic and foreign mining and energy companies, as well as foreign utilities. A total of $10.9 million was spent on the projects, of which Eldorado's share was $5.3 million. A number of projects are nearing the stage where the ore potential can be determined more accurately.

As in 1979, field activities ranged from Newfoundland to the Yukon, including seven provinces and both territories. The percentage of expenditures dedicated to exploring the Athabasca basin in northern Saskatchewan and Alberta was increased from 65 to 73 percent, reflecting the Company's confidence in this highly prospective area. Including Eldor's participation in the Saskatchewan Uranium Joint Venture (SUJV), Eldorado's holdings in the Athabasca basin at the end of 1980 totalled 2,648,569 acres (870,436 net acres). These properties continue to be one of the Company's most important assets.

During the year, Eldorado signed an agreement which permitted settlement of the outstanding treaty land entitlement claim of the Stoney Rapids Indian Band of Black Lake in northeastern Saskatchewan. Formerly, Eldorado held a provincial lease to the mineral rights. Upon implementation of the agreement, Eldorado will continue to have the right to explore and develop minerals on this land.

Eldor Resources

As noted previously, during 1980 Eldor Resources repaid some of the uranium concentrates borrowed from Uranium Canada, Limited to finance the purchase of a one-sixth interest in the SUJV, which includes the Key Lake orebodies in the Athabasca basin. The orebodies are being developed and will be produced by Key Lake Mining Corporation (KLMC), an operating company owned by the joint venture.

The Key Lake Board of Inquiry, established by the Saskatchewan Department of the Environment, conducted extensive public hearings during the year to review the environmental and social conditions under which construction and operation of the proposed mine and mill should proceed. The Board's report was released early in 1981.

Meanwhile, interim approvals were granted for the performance of critical work and the installation of some services which were deemed essential in maintaining the schedule for a start-up in 1983. Construction of an all-weather road connecting the mine site with the provincial highway system was essentially complete at year-end, on schedule and under budget. Although being built by the provincial government, KLMC is funding the major share of the cost of the road. During the year, KLMC selected a contractor to manage the engineering, procurement and construction of the Key Lake mill.

Total expenditures on the Key Lake project during 1980 amounted to $30 million, of which Eldor's share was $5 million.

The proposed mine and mill will have a design capacity of 12 million pounds of uranium concentrates annually. Eldor's participation in the project will substantially increase the amount of concentrates available to Eldorado through the 1980s and 1990s.

Processing Expansion

A number of significant events took place in 1980 regarding the Company's proposals to expand its refining and conversion operations in Ontario and to locate new processing facilities in Saskatchewan.

Ontario

As reported in the 1979 annual report, Eldorado was proposing to build a new 9,000-tonne integrated refining/UF_6 conversion facility at Hope Township near Port Hope. In April, the Government of Canada announced that the project would be relocated to Blind River in order to encourage industrial development in this region of Ontario.

Following the government's announcement, Eldorado redesigned its Ontario expansion program. The new program calls for the construction of an 18,000-tonne refinery at Blind River and a 9,000-tonne expansion of UF_6 conversion capacity at the present site within Port Hope. Upon completion of both projects, the existing 25-year-old refining circuit at Port Hope will be shut down and uranium trioxide (UO_3) produced at the Blind River refinery will be shipped to Port Hope for conversion into UO_2 and UF_6.

Accordingly, site applications were filed with the regulatory agencies, development agreements were negotiated with both municipalities and the Mississauga Indian Band at Blind River, public information meetings were held in the two communities and site preparation was completed at Blind River by year-end. Construction at Blind River is scheduled to begin this Spring and both facilities will be in production during 1984.

The redesigned program has accelerated capital expenditures on UO_3 refining capacity. Under the former plan, existing refining capacity at Port Hope would have been replaced later in the 1980s.

Although more capital intensive, the new plan offers a number of significant advantages. All refining will be consolidated at one site and all conversion operations at another, thus reducing costly duplication of facilities and rationalizing the transportation of chemicals and products. By the mid-1980s, Eldorado will have replaced all of its pre-1970 processing operations with new facilities designed to meet today's environmental standards and the needs of the marketplace.

The expansion program will triple Eldorado's UF_6 capacity, permiting the Company to fully participate in the rapid increase in foreign demand which is expected to develop during the 1980s and beyond.

Saskatchewan

Early in 1980, public hearings were held in Saskatchewan regarding the Company's selection of a site for a UF_6 facility near Warman to process uranium concentrates from new mines expected to be developed in northern Saskatchewan. The hearings were conducted under the federal Environmental Assessment and Review Process (EARP). The subsequent report stated that the proposal was acceptable in terms of environmental and health/safety considerations. However, EARP recommended that approval be withheld pending an assessment and additional hearings regarding any possible impact on the religious beliefs of the community and other social factors.

Eldorado's options to purchase land did not provide sufficient time for the studies and hearings recommended by EARP. Consequently, the Company dropped its legal interest in the properties, although this area is still being considered as a potential site.

Eldorado's assessment of the Saskatchewan project and its location is continuing in the absence of immediate time constraints. Timing of the project will depend upon the pace of new mine development in the province and a clearer understanding of the social criteria used to assess the project. Additional Saskatchewan mine production is not expected to support processing facilities until some time beyond 1985.

Financing

The expansion program now under way will more than double Eldorado's capacity to produce and process uranium mine concentrates for the generation of electricity. During the next three years, the Company's capital requirements are estimated to be approximately $600 million (current $), including the expansion programs, investments at current operations and the re-financing of existing debt.

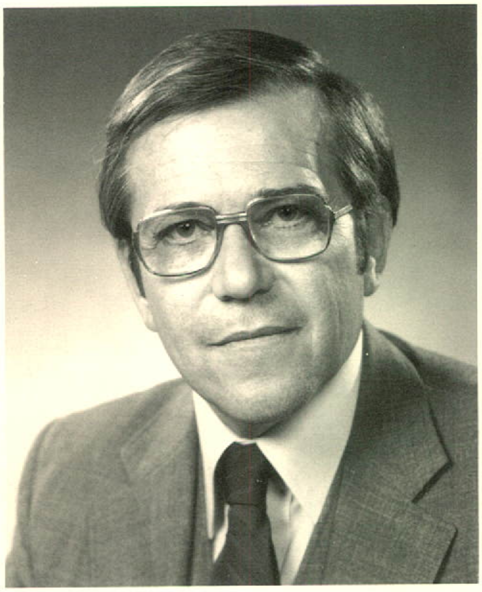
Eldorado proposes to finance these undertakings by borrowing funds in a variety of private markets in Canada and elsewhere, continuing the practice of recent years. It is recognized that the Company already has a high debt-equity ratio and that further borrowings will be difficult, given the current capital base. Accordingly, the Company has been assessing ways in which the financial base can be strengthened, and is engaged in negotiations with the Shareholder for a substantial increase in equity capital.

Prospects

In view of the present uranium market, Eldorado's financial performance is likely to remain less than satisfactory in the near term.

The past year witnessed an increasing determination by the industrialized nations to meet their energy needs by the use of nuclear power. Eldorado will be well placed to meet growing market requirements beyond 1983.

The quality of assets being developed is exceptional. The added capacity and world-scale size of the new facilities will permit the Company to participate fully in the expansion of world markets for uranium.



N.M. Ediger
Chief Executive Officer

Direction and Management

Eldorado Nuclear Limited is incorporated under the Canada Business Corporations Act and listed as a proprietary corporation in Schedule D of the Financial Administration Act. Its shares are held by the Minister of Energy, Mines and Resources in trust for Her Majesty in Right of Canada. The board of directors derives its authority from the Shareholder. Directors are elected annually.

Eight members of the board are outside directors, representing a broad spectrum of business and public policy experience in Canada and elsewhere. In addition to their overall responsibilities as members of the board, each outside director serves on at least one of the board's committees.

Board of Directors

Marcel Bélanger, O.C., C.A.
President
Gagnon et Bélanger Inc.
Quebec City, Quebec
Also director of:
Abitibi-Price Inc.
Bell Canada
Celanese Canada Inc.
The Great West Life Assurance Co.
Le Group Commerce
The Hudson's Bay Company
John Labatt Limited
The National Bank of Canada
Pratt & Whitney Aircraft of Canada Ltd.
The Price Company Ltd.
Provigo Inc.
Scan Marine Inc.

W. J. Bennett
Consultant
The Iron Ore Co. of Canada Ltd.
Montreal, Quebec
Also director of:
The C. D. Howe Research Institute (Chairman)
Canadian Pacific Limited
Canadian Reynolds Metals Company Limited
Canron Limited
Cominco Ltd.
The Investors Group
Peterson, Howell & Heather (Canada) Inc.
Philips Canada Ltd. (Chairman)

Dr. Roger A. Blais, Eng.
Managing Director/Consultant
Quebec Industrial Innovation Centre
Montreal, Quebec
Also director of:
Institute for Research on Public Policy (Board of Trustees)
Polynergy (1980) Inc.
Quebec Industrial Innovation Centre
Science Council of Canada (Member)

L. C. Bonnycastle, B.A., F.S.A.
Consultant
Canadian Corporate Management Company Limited
Toronto, Ontario
Also director of:
Canadian Corporate Management Company Limited
Cavendish Investing Group
Harlequin Enterprises Limited

M. A. Cohen
Deputy Minister
Department of Energy, Mines and Resources
Ottawa, Ontario
Also director of:
Atomic Energy of Canada Limited
Petro-Canada

N. M. Ediger
President and Chief Executive Officer
Eldorado Nuclear Limited
Ottawa, Ontario
Also director of:
Canadian Nuclear Association (Executive Committee)
Council, the Uranium Institute (Executive Committee)
Eldor Resources Limited
Eldorado Aviation Limited
The Mining Association of Canada
National Council, Canadian Institute

of International Affairs

J. Gerald Godsoe, Jr.
Partner
Stewart, MacKeen & Covert
Halifax, Nova Scotia

N. G. Van Nest
Chairman
Heritage Securities Corporation
Toronto, Ontario
Also director of:
Dellview Holdings Limited
Expetro Resources Limited
Heriseco Ventures Limited

National Business Systems Inc.
Royal Canadian Geographical Society
Serpine Holdings Limited

Maurice A. A. C. Swertz, Sr.
President
Swertz Bros. Construction Ltd.
Weyburn, Saskatchewan
Also director of:
Frontier Homes Ltd.
Global Homes Ltd.
Lumberjack Enterprises Ltd.
Weyburn Industries Ltd.
Saskatchewan Chamber of Commerce
Polyco Window Manufacturing Limited

Board Committees

Audit Committee

M. Bélanger, Chairman
L. C. Bonnycastle
J. G. Godsoe, Jr.

Finance Committee

N. G. Van Nest, Chairman
W. J. Bennett
M. A. Cohen
N. M. Ediger

Executive Development and Compensation Committee

W. J. Bennett, Chairman
R. A. Blais
L. C. Bonnycastle
M. A. A. C. Swertz, Sr.

Officers

Nicholas M. Ediger
President and Chief Executive Officer

Maurice J. Moreau
Executive Vice-President
and Chief Operating Officer

George Boyce
Vice-President, Marketing

Ronald G. Dakers
Vice-President, Refining

Thomas J. Gorman
Vice-President, Finance

Kenneth M. Haapanen
Vice-President, Mining

Sandy Mackay-Smith
General Counsel
and Corporate Secretary

Gordon A. Frost
Treasurer

W. John Jussup
Assistant Secretary

Richard P. Nannini
Assistant Secretary

Jerry H. Kinshella
Assistant Treasurer

Financial Review and Consolidated Statements

for the year ended December 31, 1980

Financial Review

Revenue and Earnings

Despite an 18 percent decrease in revenues from the 1979 level of $111.5 million to $91.1 million in 1980, the Company's net earnings increased from $0.4 million to $1.5 million. This resulted primarily from two events which occurred during the fourth quarter:

(i) The cancellation and rescheduling of deliveries of certain mine concentrates in 1980 resulted in reversal of the provision established in 1979 for losses expected on these deliveries. The net gain to the Company was $6.1 million.

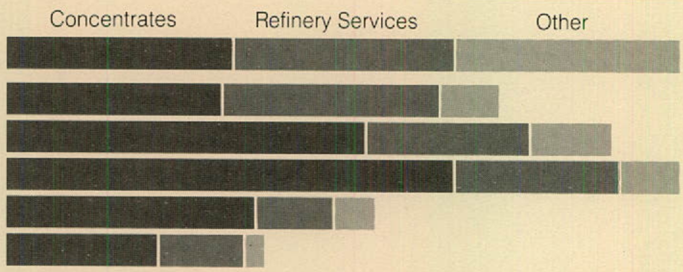
(ii) Because inventories became available, a portion of the mine concentrates borrowed from Uranium Canada, Limited (UCAN) was repaid. The concentrates were originally borrowed and subsequently sold to finance the acquisition of the Company's interest in the Saskatchewan Uranium Joint Venture (SUJV), which includes the Key Lake project. The unit production cost of the concentrates repaid was substantially lower than the unit value at which the loan was stated. Thus, the repayment resulted in a net gain to the Company of $3.1 million.

Aside from the two factors above, the Company's gross margins remained at the unsatisfactory levels experienced in 1979, due to depressed U_3O_8 market prices and production problems at both operating divisions. Since the mine/mill and the refinery/conversion operations are both largely fixed cost in nature, the decrease in production resulted in increased unit costs. However, by year-end the production problems had been substantially alleviated.

Both 1980 and 1979 revenues, gross margins and net earnings were substantially below the levels of 1978. In 1978, revenues of $124 million and net earnings of $17.6 million were achieved, almost entirely due to large sales of inventories of mine concentrates at the favourable prices in a buoyant spot market. The proceeds of these sales were used to help finance the Com-

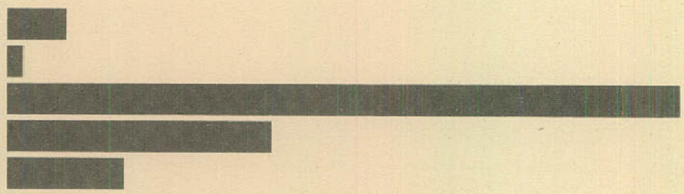
Revenue

1980	$ 91,116,000
1979	$111,498,000
1978	$124,046,000
1977	$ 68,623,000
1976	$ 47,708,000



Net Earnings

1980	$ 1,506,000
1979	$ 398,000
1978	$ 17,618,000
1977	$ 6,933,000
1976	$ 3,073,000



pany's capital expenditures.

The Company's expenditures on Research and Development remained at much the same levels in 1980 as in 1979, after having risen substantially over 1978 levels. Exploration expenditures were down slightly in 1980 after having risen by 57% in 1979. This results from the advancement of many of the projects to a more mature stage. The above reflects the Company's continuing commitment to the expansion of its resource and technology bases. Corporate administration expenses were similar to those in 1979 and 1978.

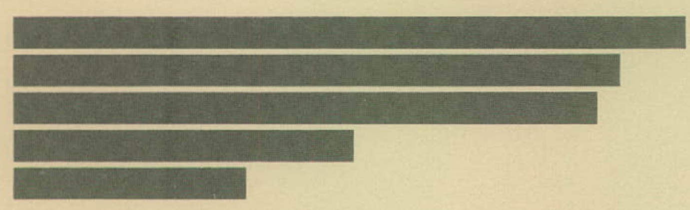
As a result of the capital cost allowance available from the high levels of capital expenditure currently underway, no income taxes were payable in 1980, as was the case in 1979 and 1978.

Financial Position

The capital employed by the Company grew substantially during 1980 to $303 million. However, because much of the growth in assets is as a result of

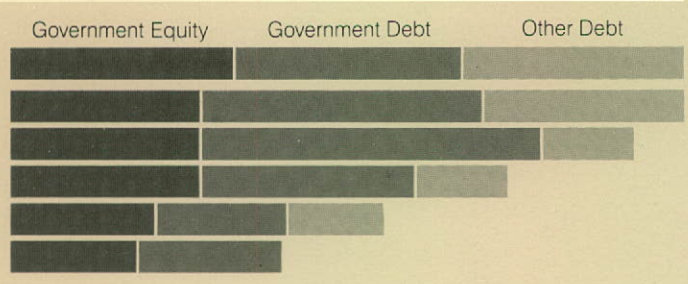
Assets

1980	$359,119,000
1979	$325,965,000
1978	$314,882,000
1977	$183,775,000
1976	$125,613,000



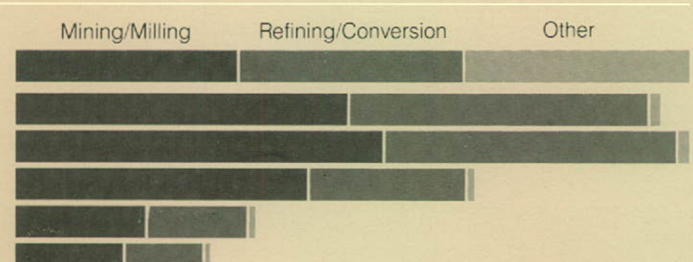
Equity and Long-Term Debt

	% Equity	Equity and Debt
1980	28	$286,600,000
1979	30	$263,197,000
1978	38	$210,072,000
1977	39	$158,502,000
1976	48	$114,427,000



Capital Expenditures

1980	$ 53,949,000
1979	$ 56,296,000
1978	$ 38,196,000
1977	$ 20,063,000
1976	$ 16,201,000



investment in projects still under construction, the increased asset base will not translate into increased earning capacity until 1984.

The Company's current expansion has so far been financed entirely with externally raised debt. The Company placed $30 million of term financing during 1980, and at year-end had borrowed an additional $23.3 million by short-term interim credits. This will be converted into longer-term financing when more favourable financial market conditions prevail.

Due to unfavourable market conditions and higher production costs, there was a negligible cash flow from operations. Thus, virtually no internally generated funds were available to finance the growth in the Company's asset base.

The net effect of the above factors is a debt-equity ratio which has deteriorated from 1.6 in 1978 to 2.3 in 1979 to 2.5 in 1980. There is the prospect of substantial further deterioration, as an additional $600 million of cash will be required by 1983, mostly to finance the approved capital expansion.

To alleviate this situation, the Company has proposed further equity investment by its Shareholder, which is currently under consideration. A review of capital structures in the mining industry indicates that, over the longer term, a debt/equity ratio of around 0.5 ($2 equity for each $1 of debt) is appropriate for a resource company. For Eldorado to achieve this key financial objective, a substantial equity investment is being recommended.

Capital Expenditures

During 1980, the Company's capital spending was $53.9 million but was less than budgeted due to the changes in the siting of the new Ontario refining and conversion facilities and consequent delay in construction.

The major rehabilitation program continued at Beaverlodge in 1980, with expenditures of approximately $12 million. This was primarily to improve the efficiency and reliability of the mill ($1.2 million) and to continue the mine mechanization program ($2.2 million). Other significant projects connected with Beaverlodge were the construction of a hangar at Saskatoon airport for the Company's aircraft ($2.7 million), the completion of the Charlot River hydro dam ($1.7 million), a new food service facility ($1.0 million), and housing ($1.2 million).

Capital spending at Port Hope amounted to approximately $3.7 million during 1980. Of this, $1.2 million was spent improving the efficiency of the UO_3 and UO_2 plants, $0.7 million to improve the reliability and yield of the UF_6 plant, $0.2 million on the Metallurgical Products plant and approximately $1.7 million on general maintenance, support and administrative services projects.

Expenditures in 1980 on the proposed Blind River UO_3 refinery and Port Hope UF_6 conversion expansion amounted to $11.4 million and $3.5 million respectively. Site acquisition and preliminary construction has been completed at Blind River while at Port Hope, public meetings describing the proposed expansion were conducted. The bulk of the costs incurred to date at Port Hope are for engineering, design and equipment purchases. The two plants are expected to be completed in 1983 at a total cost estimated at approximately $200 million.

During the year, $3.3 million was paid by Eldor Resources to the SUJV for its share of the continuing development costs of the Key Lake uranium orebodies. Most of the expenditures in 1980 related to the environmental impact hearings and preparation for dewatering of the lakes covering the orebodies. In addition, interest of $10.9 million was incurred on Eldor's long-term debt financing. Key Lake is expected to commence production in 1983. The Company's share of the development costs still required to bring Key Lake into production is approximately $80 million.

The most significant capital expenditure by Eldorado Aviation was $12.0 million for the remaining amount owing on the Boeing 737 cargo-passenger aircraft, which was leased and put into service in mid-1980. (Approximately $4 million was paid in 1979.) The old DC-4 aircraft and helicopters were sold for $558.000.

Miscellaneous corporate capital expenditures, including those by the Exploration and Research and Development divisions, amounted to $0.6 million.

The mix of the Company's capital spending has changed substantially in recent years. In 1978, approximately 92% of capital spending was on improvement of or additions to the existing operations, with the remainder on the major expansion projects. This proportion dropped to 79% in 1979 and 66% in 1980, as the improvement programs draw to completion and the major new projects move into more advanced stages.

Income Tax

Eldorado is subject to the full provisions of the Income Tax Act and does not enjoy any special privileges because of its ownership by the Crown. Indeed, since the Company was purchased in 1944, Eldorado has paid some $29 million in federal income taxes.

Saskatchewan Uranium Royalties

The Company is subject to the provisions of the Saskatchewan Mineral Resources Act for the payment of uranium royalties. Provincial mineral royalty payments are not deductible from income for determining the federal income taxes payable.

Interim Reports

During 1980, the Company continued the practice of issuing Interim Reports. The table sets out the unaudited results of operations of the Company by quarter for 1978, 1979 and 1980. The nature of Eldorado's business is such that the results of any interim period are not necessarily indicative of results for a full year.

Interim Reports (Millions of dollars)

		Q1	Q2	Q3	Q4	Year
1980	Revenue	$18.1	$29.4	$21.2	$22.4	$ 91.1
	Gross Profit	4.8	7.4	(1.6)	12.5	23.1
	Net Earnings	(0.1)	0.2	(5.0)	6.4	1.5
1979	Revenue	$21.0	$33.4	$19.9	$37.2	$111.5
	Gross Profit	7.3	8.0	(2.0)	8.7	22.0
	Net Earnings	1.7	1.0	(4.0)	1.7	0.4
1978	Revenue	$43.7	$37.7	$21.3	$21.3	$124.0
	Gross Profit	23.4	12.2	8.1	(5.0)	38.7
	Net Earnings	12.3	7.6	2.4	(4.7)	17.6

Report of Management's Accountability

The accompanying financial statements and all information in the Annual Report are the responsibility of management and the Board of Directors of the Company. The financial statements were prepared by management in conformity with generally accepted accounting principles considered to be appropriate in the circumstances.

Eldorado maintains internal accounting controls which are designed to provide reasonable assurance that assets are safeguarded from loss or unauthorized use, and that reliable financial information is produced. The Company has also established a "Code of Ethics" for employees to prevent conflicts of interest on the part of employees and to ensure that there is no unauthorized disclosure by employees of confidential information. The Company has established an internal auditing department, whose functions include reviewing the systems of control to ensure that they are adequate and functioning properly.

Annually, the financial statements are examined by the Company's external auditors. Their examination is made in accordance with generally accepted auditing standards and includes a review and evaluation of the Company's system of internal accounting controls and such tests and other procedures as they deem necessary to provide reasonable assurance as to the fairness of the financial statements.

The Board of Directors, through its Audit Committee consisting solely of outside directors, is responsible for reviewing and monitoring the Company's accounting and reporting practices. The Audit Committee meets with management and both the internal and external auditors to satisfy itself that their responsibilities are properly discharged. Both the internal and external auditors have free access to this Committee to discuss the results of their work and their opinions on the adequacy of the internal accounting controls and the quality of financial reporting.

Eldorado Nuclear Limited

Statement of Accounting Policies

The accompanying consolidated financial statements were prepared by management in conformity with generally accepted accounting principles considered to be appropriate in the circumstances, and have been applied on a basis consistent with that of the preceding year. A summary of significant accounting policies of the Company is presented to assist the reader in interpreting the statements contained herein.

Consolidation

The consolidated financial statements include the accounts of Eldorado Nuclear Limited and its wholly-owned subsidiaries, Eldorado Aviation Limited and Eldor Resources Limited.

Inventories

Inventories of mine concentrates and refined and converted products are valued at the lower of weighted average cost or net realizable value. Cost for customer-owned products is the cost of the refining and conversion processes only.

Inventories of mine concentrates are initially measured and accounted for in the financial statements when the material is sealed in containers upon completion of the milling process.

Supplies
Operating and general supplies are carried at cost.

Property and Equipment
Assets are carried at cost. Costs of additions, betterments, and renewals are capitalized. When assets are retired or sold, the resulting gains or losses are reflected in current earnings.

Maintenance and repair expenditures are charged to cost of production.

Depreciation
The principal depreciation method used is the straight line method based on the estimated useful lives of the property and equipment. The estimated useful life of the majority of the property and equipment in service is 10 years.

Capitalization of Interest
Interest costs on funds borrowed to finance the development and construction of major assets are capitalized during the development and construction period.

Mine Development and Preproduction Costs
Certain mine development and refinery costs associated with capacity additions are deferred until commencement of production. These costs are then amortized based on production over not more than 10 years. Other costs are charged to production as incurred.

Research and Development and Exploration Costs
Expenditures for applied research and development relative to the products and processes of the Company and expenditures for geological exploration programs are charged against earnings as incurred.

Pension Plan
The Company has a contributory, defined benefit, trustee pension plan covering all of its regular full-time employees. Assets in the pension fund are valued by a three-year moving average market value method, while liabilities are costed by the entry age normal cost method.

Pension costs are funded and recorded at rates confirmed by the consulting actuary pursuant to periodic actuarial revaluations. All actuarially-determined unfunded liabilities are amortized and funded over periods that adequately reflect their specific nature, up to a maximum of 15 years.

Sales of Products and Services
In accordance with normal industry practices, the Company contracts for future delivery of mine concentrates and refinery conversion services. Sales revenue is recorded in the fiscal year that title passes or, with customer-owned material, when delivery is effected.

Foreign Exchange
Accounts receivable and accounts payable denominated in foreign currencies are translated into Canadian dollars at rates of exchange in effect at year-end; income and expenses at rates in effect during the year. Gains or losses resulting from such translation practices are reflected in the statement of consolidated earnings and retained earnings.

Income Tax
The Company follows the tax allocation method of providing for income taxes. Taxable income may be different from reported earnings before taxes because certain items of income and expense are recorded in time periods different for tax purposes from those for accounting purposes. The difference between the taxes calculated as payable each year and those charged against earnings on the tax allocation method is accumulated and carried forward in the statement of consolidated financial position under the caption Deferred Taxes.

Statement of Consolidated Financial Position

As at December 31st	1980	1979	1978
		(Thousands of dollars)	
Currents assets			
Cash and short-term investments at cost	$ —	$ 5,249	$ 36,076
Accounts receivable	13,591	19,613	32,137
Mine concentrates on loan	9,052	8,596	9,413
Inventories	8,815	16,555	8,937
Supplies	15,295	12,603	8,996
Prepaid expenses	462	4,607	749
	47,215	*67,223*	*96,308*
Current liabilities			
Bank loans and advances	23,322	—	—
Accounts payable	23,850	20,628	16,451
Long-term debt due within one year	8,353	12,153	11,262
Promissory note	—	—	56,394
Provision for loss on uncompleted contracts	—	16,066	3,820
	55,525	*48,847*	*87,927*
Working capital (deficiency)	(8,310)	18,376	8,381
Non-current assets			
Investment in joint venture	120,977	107,351	96,316
Mine concentrates on loan	10,950	10,678	25,696
Property and equipment, net	168,794	132,502	85,013
Deferred charges	6,552	6,458	5,098
Accounts receivable	2,533	—	4,428
Other assets	2,098	1,753	2,023
	311,904	*258,742*	*218,574*
Capital employed	$303,594	$277,118	$226,955
Represented by:			
Long-term debt	$204,990	$183,093	$130,366
Other liabilities	6,286	5,077	9,534
Deferred taxes	10,708	8,844	7,349
	221,984	*197,014*	*147,249*
Shareholder's equity			
Share capital	6,586	6,586	6,586
Retained earnings	75,024	73,518	73,120
	81,610	*80,104*	*79,706*
	$303,594	$277,118	$226,955

The accompanying notes to Consolidated Financial Statements are an integral part of this statement.
Approved by the Board of Directors.

Marcel Bélanger

Ediger

Statement of Changes in Consolidated Financial Position

For the year ended December 31st	1980	1979	1978
		(Thousands of dollars)	
Source of working capital			
From operations:			
Earnings before extraordinary item	$ 1,506	$ 398	$ 17,130
Add changes to earnings which did not require working capital:			
Depreciation and amortization	15,493	9,978	8,400
Deferred taxes	1,864	1,495	7,349
	18,863	*11,871*	*32,879*
Increase in long-term debt	55,776	64,880	45,214
Mine concentrates repaid and due within one year	8,819	32,413	10,230
Decrease in accounts receivable	—	4,428	6,640
Increase in other liabilities	1,209	—	—
Reduction of income taxes due to loss carry forward	—	—	488
	84,667	113,592	95,451
Use of working capital			
Increase in accounts receivable	2,533	—	—
Decrease (increase) in other liabilities	—	3,820	(3,820)
Increase in carrying value of mine concentrates on loan	9,091	17,394	10,328
Additions to property and equipment	49,483	56,063	38,188
Investment in joint venture	13,626	11,035	96,316
Repayment of long-term debt	25,527	—	—
Long-term debt due within one year	8,353	12,153	11,262
Other	2,740	3,132	1,737
	111,353	103,597	154,011
Increase (decrease) in working capital	(26,686)	9,995	(58,560)
Working capital at beginning of year	18,376	8,381	66,941
Working capital (deficiency) at end of year	$ (8,310)	$ 18,376	$ 8,381

The accompanying notes to Consolidated Financial Statements are an integral part of this statement.

Statement of Consolidated Earnings and Retained Earnings

For the year ended December 31st	1980	1979	1978
		(Thousands of dollars)	
Revenue			
Sales of products and services	$91,116	$111,498	$124,046
Expenses			
Cost of products and services sold	68,019	89,545	85,328
Exploration	5,286	6,579	4,194
Research and development	2,904	2,858	2,069
Administration	5,149	4,992	4,350
Other (income) and expense	4,318	1,431	(80)
Total expenses	85,676	105,405	95,861
Earnings before taxes and extraordinary item	5,440	6,093	28,185
Income taxes and mineral royalties	3,934	5,695	11,055
Earnings before extraordinary item	1,506	398	17,130
Reduction of income taxes due to loss carry forwards	—	—	488
Net earnings	1,506	398	17,618
Retained earnings at beginning of year	73,518	73,120	55,502
Retained earnings at end of year	$75,024	$ 73,518	$ 73,120

The accompanying notes to Consolidated Financial Statements are an integral part of this statement.

Notes to Consolidated Financial Statements

for the year ended December 31st, 1980

1. Eldorado Nuclear Limited

Eldorado Nuclear Limited is incorporated under the Canada Business Corporations Act, is subject to the Financial Administration Act and the Government Companies Operations Act, and is an agent of Her Majesty in Right of Canada. The outstanding shares were acquired by the federal government in 1944 to secure a source of uranium for Canada.

The Company, wholly-owned by Her Majesty in Right of Canada, is involved in various aspects of the nuclear fuel cycle, primarily the exploration, mining, refining and conversion of uranium.

Eldorado's Beaverlodge mine and mill in northwestern Saskatchewan produce uranium mine concentrates. Most sales to electric utilities are made under long-term, annual delivery contracts, and title transfer is generally made at the Company's Port Hope facilities prior to further processing. All export contracts must first be approved by federal regulatory agencies.

The plants at Port Hope refine uranium concentrates and convert the pure uranium to produce ceramic-grade uranium dioxide powder and uranium hexafluoride as steps in the nuclear fuel cycle. Utility customers in Canada and other nations send material to Port Hope for such processing and the converted product is shipped on behalf of customers to fabricators in Canada or to enrichment plants in the United States, Europe and the USSR. At year-end 1980, the refinery held 25 million pounds of customer-owned uranium at various stages of processing (1979–27 million pounds). All exports of material on behalf of customers require a licence from federal regulatory agencies.

The Port Hope operation also includes metallurgical facilities to produce depleted uranium metal, experimental fuels, and various other related products, as well as storage facilities for U_3O_8 and for processed UF_6.

A wholly-owned subsidiary, Eldor Resources Limited, owns a one-sixth interest in the Saskatchewan Uranium Joint Venture, which is developing new uranium properties at Key Lake in northern Saskatchwan. Another wholly-owned subsidiary, Eldorado Aviation Limited, provides transportation services to the Beaverlodge mine-site.

Each year, after the normal preparation, review and approval of budgets by the Board of Directors of Eldorado for the next calendar year, the Company submits the capital budget for approval by the Governor-in-Council upon recommendation of the Minister of Energy, Mines and Resources, the Minister of Finance, and the President of the Treasury Board. This budget is subsequently tabled in Parliament.

2. Accounting Policies

A statement of significant accounting policies of the Company is provided on page 20.

3. Other Income and Expense

	1980	1979	1978
		(Thousands of dollars)	
Expenses —			
Interest on long-term debt	$6,856	$ 6,111	$ 6,118
New refinery site selection costs	4,141	—	913
Miscellaneous	548	147	272
Income —			
Interest on investments	(465)	(3,840)	(4,478)
Gain on partial repayment of Eldor-UCAN concentrate loan	(5,763)	—	—
Other non-operating items	(999)	(987)	(2,905)
	$4,318	$ 1,431	$ (80)

4. Income Taxes and Mineral Royalties

The provisions for income taxes and mineral royalties were as follows:

	1980	1979	1978
		(Thousands of dollars)	
Income taxes — current	$ —	$ —	$ 488
— deferred	1,864	1,495	7,349
	1,864	1,495	7,837
Mineral royalties	2,070	4,200	3,218
	$3,934	$ 5,695	$11,055

The reconciliation between the federal statutory income tax rate and the Company's effective rate of income tax and mineral royalties is as follows:

Percentage of Pre-tax Earnings	1980	1979	1978
Federal statutory income tax rate	48.3	46.0	46.0
Resource and depletion allowances	(33.2)	(24.4)	(19.3)
Adjusted income tax rate	15.1	21.6	26.7
Inventory allowance	(9.5)	(10.0)	(1.4)
Research allowance	(3.7)	(6.9)	(0.4)
Non-deductibility of income debenture interest	27.4	20.5	3.4
Other	4.9	(0.6)	(0.5)
Effective income tax rate	34.2	24.6	27.8
Mineral royalties	38.1	68.9	11.4
Net effective rate	72.3	93.5	39.2

Provincial mineral royalties, which are not deductible for federal income tax purposes, are calculated in part as a percentage of revenues and consequently the effective rate can fluctuate drastically from year to year.

As a result of an audit of taxation years prior to 1977, the Company received reassessment notices in 1978 increasing income for tax purposes and decreasing tax loss carry forwards by approximately $4.0 million. The Company filed a Notice of Objection with respect to these reassessments. However, to date no formal decision has been reached.

5. Mine Concentrates on Loan

Mine concentrates on loan are recorded at current inventory cost, which is lower than net realizable value. These costs are classified as either current or non-current assets, according to scheduled or estimated repayments. The mine concentrates on loan are secured by the pledging of marketable securities and a fixed and floating charge over the borrower's assets.

Income from the mine concentrates on loan is included in revenues in the amount of $2.5 million (1979–$6.5 million; 1978–$7.8 million).

6. Property and Equipment

	1980	1979	1978
		(Thousands of dollars)	
Land	$ 3,642	$ 2,353	$ 2,127
Buildings	69,731	55,866	38,265
Equipment	159,823	144,205	114,975
Construction in progress	33,711	16,012	7,665
	266,907	218,436	163,032
Less accumulated depreciation	98,113	85,934	78,019
	$168,794	$132,502	$ 85,013
Depreciation for year	$ 13,191	$ 8,574	$ 8,114

7. Deferred Charges

	1980	1979	1978
		(Thousands of dollars)	
Mine development	$ 4,500	$ 5,523	$ 4,774
Refinery preproduction	2,052	935	324
	$ 6,552	$ 6,458	$ 5,098
Amortization for year	$ 2,302	$ 1,404	$ 286

8. Long-Term Debt

	1980	1979	1978
		(Thousands of dollars)	
i) From Canada			
8⅜% notes due 1978-80	$ —	$ 605	$ 4,737
7% note due 1979	—	—	7,130
5 7/16% notes due 1980	—	11,548	11,548
4 15/16% notes due 1981	7,762	7,762	7,762
6½% notes due 1982	10,062	10,062	10,062
5⅞% notes due 1983	5,082	5,082	5,082
6⅜% notes due 1984	10,093	10,093	10,093
ii) Other			
Floating rate income debentures due 1983	40,000	40,000	40,000
Floating rate promissory notes due 1985	30,000	—	—
Floating rate capitalized lease expiring 1992	15,615	—	—
iii) Mine concentrates borrowed	94,729	110,094	45,214
Sub-total	213,343	195,246	141,628
Less: Current portion of long-term debt listed above	8,353	12,153	11,262
Total	$204,990	$183,093	$130,366

8. a) Loans from Canada and Other

Prepayment of the notes from Canada may be made in specified groups without premium or penalty. The income debentures bear interest at approximately one-half of the banks' prime lending rate while the promissory notes bear interest at three-eighths of one percent below prime lending rate. The capitalized lease bears interest at a rate which approximates the prime lending rate.

The long-term debt payments due in each of the next five years are as follows:

1981–$8,352,895; 1982–$10,734,124; 1983–$45,843,315; 1984–$10,956,249; 1985–$30,981,109.

8. b) Mine Concentrates Borrowed

	1980	1979	1978
		(Thousands of dollars)	
i) Due by Eldor Resources Limited	$ 94,729	$110,094	$ 37,422
ii) Due by Eldorado Nuclear Limited	—	—	7,792
	$ 94,729	$110,094	$ 45,214

i) Due by Eldor Resources Limited

In conjunction with the purchase of its interest in the Key Lake joint venture, Eldor Resources Limited arranged with Uranium Canada, Limited (UCAN) for a loan of two million pounds of uranium mine concentrates (U_3O_8) from the Government of Canada stockpile. This material, of which 730,600 pounds were drawn in 1978 and 1,269,400 pounds in 1979, was sold at world market prices to fund the Key Lake acquisition.

Under the terms of the agreement, Eldor must pay interest on the loan value of borrowed concentrates (the loan value being the price at which it sells the concentrates to its customers) at a rate equal to that charged by the federal government on five-year loans to Crown corporations as of the initial loan date (initially 9⅛%). This rate is then negotiable every five years thereafter.

The interest payable to UCAN under the loan agreement is recorded as an increase to the investment in the joint venture and payment is deferred until commencement of commercial production. This deferred interest is then payable out of the operation's cash flow.

The original intention was to repay this loan out of Eldor's share in the production of Key Lake. However, because of the availability of excess inventory from Beaverlodge production during 1980, a portion of it was repaid during the year. The difference between the average unit loan value and the U_3O_8 inventory cost is reflected in the statement of consolidated earnings and retained earnings as a reduction in "Other Expenses". As a minimum, the loan will be repaid in annual installments after commencement of operations, with full repayment required by 2010.

As collateral for the loan, Eldor has given UCAN a debenture of $200 million which is secured by a fixed and floating charge on all of its assets and undertakings, both present and future. If Eldor is unable to meet its obligations to return borrowed concentrates on schedule, UCAN has access to Eldor's undivided one-sixth equity interest in the joint venture. The Key Lake discovery alone, which forms part of the joint venture's assets, is estimated to contain in excess of 150 million pounds of uranium in the two defined orebodies.

ii) Due by Eldorado Nuclear Limited

At year-end 1978, the Company borrowed uranium mine concentrates from the Government of Canada stockpile through Uranium Canada, Limited to cover a production shortfall from the Beaverlodge mine. In May 1979 the loan was repaid.

9. Sales Contracts

Provision was established in 1978 for anticipated losses on low-priced U_3O_8 deliveries in 1979 and 1980. This provision was increased in 1979 to $16,066,000 to meet additional anticipated losses in 1980. At December 31, 1980 all deliveries of these low-priced U_3O_8 contracts have been completed or the Company was able to negotiate cancellations, resulting in the elimination of the provision.

At December 31, 1980 the Company had commitments for the delivery of 6,864,000 pounds of uranium mine concentrates from 1981 to 1987.

10. Share Capital

	1980	1979	1978
		(Thousands of dollars)	
Authorized:			
An unlimited number of common shares of no par value			
Issued and fully paid:			
70,500 shares to Canada	$6,586	$6,586	$6,586

11. Commitments and Contingencies

a) The last actuarial valuation of the Eldorado Pension Plan (1959), as of December 31, 1979, revealed an unfunded liability of $248,000, which is being amortized and funded as provided in Eldorado's accounting policies and the Pension Benefits Standards Act.

b) The Company has entered into long-term leases on certain properties up to 1985 with annual rental payments averaging $495,000.

c) Through its wholly-owned subsidiary Eldor Resources Limited, the Company is a one-sixth partner in a joint venture that discovered and has commenced developing the orebodies near Key Lake, Saskatchewan. In accordance with the partnership agreement, Eldor is obligated to meet its proportionate share of the commitments of the joint venture. At December 31, 1980, Eldor's share of the preliminary estimated cost to commence production is approximately $80 million.

d) The Company has plans for the expansion of its refining and conversion capacity to meet projected increases in world demand for uranium.

During 1980, the federal government directed the Company to alter the site of its new Ontario facilities from Hope Township to Blind River. In conjunction with this direction, the Company then revised its expansion plan for this facility. Under the new plan, all uranium refining operations will be consolidated at a new Blind River UO_3 plant, and all UO_2 and UF_6 conversion activities will take place at expanded facilities at Port Hope. This will enable the Company to phase out its 25-year-old UO_3 plant at Port Hope. The capital cost of the program to be incurred from 1980 is projected at approximately $200 million. The plants are expected to be ready for operation by late 1983. The Company is awaiting final approval of the sites from the Atomic Energy Control Board.

The Company has entered into contracts in connection with its expansion program and as at December 31, 1980, has made commitments of approximately $16 million.

e) In connection with its operations, the Company is the defendant in certain pending or threatened litigation. It is the opinion of management, based on legal counsel, that these actions will not result in any material liabilities to the Company.

12. Supplementary Information

a) Subsequent to December 31, 1980, the Company has entered into a financing agreement for the issuance of 13¼% notes due March 15, 1986 in the amount of $50 million (U.S.). This debt is listed on the Stock Exchange in London.

b) As of February 12, 1981, the Company is in the final stages of negotiation with the Shareholder for a substantial increase in its equity capital.

c) The Company's by-laws provide for between seven and ten Directors. At December 31, 1980, the Company had nine Directors and nine Officers. One of the Directors was also an Officer.

Remuneration of Officers as Officers in 1980 totalled $626,000 and remuneration of Directors as Directors in 1980 totalled $55,000.

d) During 1980, sales commissions totalling $178,514 were paid to Marubeni Corporation who have been retained as exclusive sales agents since 1960.

e) Interest costs of $2.8 million paid in 1980 have been capitalized under property and equipment and investment in joint venture (1979-nil). Deferred interest of $10.2 million recorded in 1980 has been capitalized under investment in joint venture (1979–$7.9 million).

13. Segmented Information

a) Industry Segment:
The Company is of the opinion that virtually all its sales revenues are in the industry segment identified as the nuclear fuel industry.

b) Sales:
Sales revenues of the Company are derived primarily from sales to foreign and domestic electric utilities as follows:

	1980	1979	1978
		(Thousands of dollars)	
Export Sales	$77,738	$ 48,893	$109,140
Domestic Sales	13,378	62,605	14,906
Total Sales	$91,116	$111,498	$124,046

Auditors' Report

The Honourable Marc Lalonde, P.C., M.P.
Minister of Energy, Mines and Resources
Ottawa, Ontario

We have examined the statement of consolidated financial position of Eldorado Nuclear Limited as at December 31, 1980 and the statements of consolidated earnings and retained earnings and changes in consolidated 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 give a true and fair view of the financial position of the Company as at December 31, 1980 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.

We further report that, in our opinion, proper books of account have been kept by the Company, the financial statements are in agreement therewith and the transactions that have come under our notice have been within its statutory powers.

M.H. Rayner
Acting Auditor General of Canada

Coopers & Lybrand

Ottawa, Ontario
February 12, 1981

Glossary of Financial Terms

Amortization
Application of a deferred charge to the expense of a business proportionately over a fixed period.

Asset*
Anything of value owned by a company or individual.

Capital*
(1) What is owned by a company or individual minus what is owed at a specified time.

(2) Total investments of owners (shareholders) of a business at a given time, which may be calculated by subtracting from the total assets all the liabilities of those other than the owners.

Capital Employed
All non-current assets of a business plus working capital.

Capital Expenditure**
An expenditure to acquire or add to a capital asset; an expenditure yielding enduring benefits.

Commitment
An anticipated expenditure, evidenced by a contract or purchase order given to an outsider, or a definite intention to assume a financial obligation at a future date.

Consolidation*
A parent plus one or more subsidiary companies which present financial reports for the group as a whole, not as separate entities.

Contingent Liability**
A legal obligation that may arise in the future out of past and/or present circumstances provided certain developments occur.

Corporation*
Legal entity or corporate person with authority to operate under provincial or federal statutes, usually formed to make a profit. Owners are liable for the debts only up to the amount of their investment.

Current Asset**
Unrestricted cash or other asset that, in the normal course of operations, is expected to be converted into cash or consumed in the production of income within one year or within the normal operating cycle where that is longer than a year.

Current Liability**
A liability whose regular and ordinary liquidation is expected to occur within one year or within the normal operating cycle where that is longer than a year. A liability otherwise classified as current but for which provision has been made for payment from other than current resources should be excluded.

Debt to Equity Ratio
The ratio of long-term debt to Shareholders' equity.

Deferred Charge**
(1) A long-term expense prepayment; an expenditure, other than a capital expenditure, the benefit of which will extend over a period of years from the time of incurrence and meanwhile is carried forward to be charged to expense over a period of years.

(2) Balance of amounts paid for goods or services received for which the payee has no further obligation and meanwhile is carried forward to be charged to expense in future years.

Deferred Taxes**
The accumulated amounts by which income taxes charged in the accounts have been increased (accumulated tax allocation credit) or decreased (accumulated tax allocation debit) as a result of timing differences.

Depreciation*
Gradual reduction of the cost of a fixed asset and gradual application of this cost to the expense of a business over the useful life of the asset.

Earnings
Total revenue less total expenditures for a period of time calculated in accordance with generally accepted accounting principles. Net earnings refers to earnings after deduction of related income taxes.

Earnings Per Share**
The portion of earnings for a period attributable to a share of issued capital of a corporation. The calculation of earnings per share is relevant only with respect to shares whose rights to participate in the earnings have no upper limit.

Equity*
(1) A right or claim to the assets of a company. Both owners and creditors have equity in a business.

(2) Amount that a business is worth beyond what it owes.

Financial Position**
The state of affairs of an organization represented by the assets, liabilities and owners' equity at any specified time.

Gross Profit**
The difference between cost and selling price; excess of net sales over the cost of goods sold.

Gross Profit Margin**
The ratio of gross profit to revenue

Interest Coverage Ratio**
The ratio of net income before interest on long-term liabilities and income taxes to interest on long-term liabilities.

Inventory**
(1) An itemized list of goods; the annual or other periodic account of stock taken in a business; the articles that are inventoried.

(2) Items of tangible property which are held for sale in the ordinary course of business, or are in the process of production for such sale, or are to be currently consumed in the production of goods or services to be available for sale.

Investment*
Funds committed to something tangible or intangible in order to receive a return either in income or use.

Liability*
(1) An amount owed to another, not necessarily due to be paid immediately.

(2) An obligation to remit money or services at a future date.

Long-Term Liability**
A liability which, in the ordinary course of business, will not be liquidated within one year or within the normal operating cycle where that is longer than a year.

Operating Profit
The excess of the revenues of a business enterprise over the expenses pertaining thereto, excluding "other" income and expense since they are derived from sources other than its regular activities.

Operating Profit Margin
The ratio of operating profit to revenue.

Prepaid Expense**
(1) A short-term expense prepayment; an expenditure, other than an outlay for inventory or a capital expenditure, which is expected to yield its benefits in the near future and meanwhile is carried forward to be charged to expense in the near future.

(2) Balance of amounts paid for services not yet received from the payee and which meanwhile is carried to be charged to expense in future years.

Property and Equipment
Property or equipment of a tangible nature owned by a business for use in its operations (not for sale), which is expected to have a useful life of several fiscal periods. Property and equipment,

Glossary of Financial Terms

continued from page 32

net, refers to property and equipment at cost less accumulated depreciation.

Ratio*
Relative size, expressed as the number of times one quantity is contained in another.

Retained Earnings*
Portion of a company's aggregate income since incorporation which remains invested in the operation after distribution of dividends to shareholders.

Return on Equity
The ratio of net earnings to shareholder's equity.

Return on Capital Employed
The ratio of net earnings to capital employed.

Revenue*
Inflow of cash or receivables from customers or clients in return for goods, services, or interest on investments.

Share Capital**
Authorized Capital – The number and par value, if any, of shares of each class of capital stock that a company may issue in accordance with its instrument of incorporation.

Issued Capital – The portion of authorized capital stock for which shares have been subscribed, allotted and entered in the share register.

Subsidiary*
Company which is controlled by another company usually through its ownership of the majority of shares.

Supplies
Materials which are consumed in the operations of a business but do not become part of the physical content of any finished product and are not held for sale in the ordinary course of business.

Working Capital**
The excess of current assets over current liabilities.

Working Capital Ratio**
The ratio of current assets to current liabilities.

* Terms reprinted with permission from the booklet "ABC's of Accounting" published by the Certified General Accountants Association of Ontario.

**Terms reprinted with permission from the booklet "Terminology for Accountants" published by the Canadian Institute of Chartered Accountants.

5-Year Summary of Operations

	1980	1979	1978	1977	1976
Income and Expenses ($000)					
Revenue	$ 91,116	$111,498	$124,046	$ 68,623	$ 47,708
Gross Profit	23,097	21,953	38,718	*27,460	*12,612
Operating Profit	9,758	7,524	28,105	15,662	5,113
Net earnings	1,506	398	17,618	6,933	3,073
Net earnings per share ($)	21.36	5.66	249.90	98.34	43.59
Financial Position at Year End ($000)					
Working capital (deficiency)	$ (8,310)	$ 18,376	$ 8,381	$ 66,941	$ 57,639
Net property and equipment	168,794	132,502	85,013	54,940	41,113
Total assets	359,119	325,965	314,882	183,775	125,613
Long-term debt	204,990	183,093	130,366	96,414	59,272
Shareholder's equity	81,610	80,104	79,706	62,088	55,155
Shareholder's equity per share	1,157.59	1,136.23	1,130.58	880.68	782.34
Capital Outlays ($000)					
Capital expenditures	$ 53,949	$ 56,296	$ 38,196	$ 20,063	$ 16,201
Depreciation and amortization	15,493	9,978	8,400	6,040	5,813
Significant Financial Ratios					
Gross profit margin	25.3%	19.7%	31.2%	40.0%	26.4%
Operating profit margin	10.7%	6.7%	22.7%	22.8%	10.7%
Return on equity	1.8%	0.5%	22.1%	11.2%	5.6%
Return on capital employed	0.5%	0.1%	7.8%	4.2%	2.6%
Debt to equity ratio	2.5	2.3	1.6	1.6	1.1
Interest coverage ratio	1.5	1.3	5.0	2.7	1.8
Working capital ratio	0.9	1.4	1.1	4.4	9.7
Selected Operating Statistics					
Number of employees at year-end	1,737	1,610	1,499	1,288	1,105
Ore mined (000 tons)	317	312	307	256	196
U_3O_8 produced (000 lbs.)	1,100	1,006	1,283	1,185	1,188
UF_6 processed (000 lbs. U)	9,361	9,890	7,096	8,525	7,331
UO_2 processed (000 lbs. U)	2,127	2,919	2,129	1,855	1,113

*Restated for comparative purposes

Pour se procurer le rapport annuel d'Eldorado Nucléaire Limitée en version française, s'adresser par écrit au siège de la Compagnie: Suite 400, 255 rue Albert, Ottawa, Ontario, K1P 6A9.

Head Office

Suite 400
255 Albert Street
Ottawa, Canada
K1P 6A9

Telephone:
613-238-5222

Telex:
053-3382

ELDORADO
ELDORADO NUCLEAR LIMITED