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GOVERNMENT POLICY IN THE CANADIAN PETROLEUM INDUSTRY

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GOVERNMENT POLICY IN THE CANADIAN
PETROLEUM INDUSTRY

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The following notes present some aspects of government policy as it relates to the petroleum industry in Canada. Policy of provincial governments, as well as that of the federal government, is considered. The term "petroleum industry" is taken to include crude oil and natural gas exploration and production, and also the transportation, processing and marketing phases of the industry.

A brief survey of recent trends and the current status of the industry is first given in order to assist the reader in his appraisal of the government role in Canadian petroleum developments.

I. Canadian Petroleum Industry Growth Since 1947

The Canadian petroleum industry has a long history, dating from 1858, but until 1947 it remained small and gave little indication of the spectacular growth so evident today. Following important oil discoveries in 1947, the industry has expanded rapidly and a fully integrated oil economy has now developed. From the producing oil and gas fields of the rather sparsely populated areas of Western Canada, pipelines have been constructed to carry crude oil and natural gas to major centres of population across the country. A large-scale producing industry has been built up and marketing facilities have been continuously enlarged. The growth of the petroleum industry was initiated by fortunate oil-field discoveries; equally fortunate is the fact that the industry has developed as an integral part of a dynamic Canadian economy.

Growth statistics are suitably measured from the base year 1946, the year prior to the Leduc oil discovery. Until then, the growth rate was rather insignificant, but it is important to keep in mind that the first oil discovery in Canada was made in 1858 and oil search had continued at intervals for almost 90 years before the present era of expansion commenced. The Province of Ontario has been an oil producer since the days of earliest discovery. In Alberta gas discoveries were made in the 1890's but the only oil and gas field of any importance until the Leduc discovery was the Turner Valley field, which was first drilled in 1914.

Today the oil producing regions, in order of importance, are Alberta, Saskatchewan, Manitoba, Ontario, Northwest Territories, British Columbia and New Brunswick, with Alberta accounting for slightly more than 80 per cent of current production and Saskatchewan, 13 per cent. Alberta and British Columbia have the country's vast natural gas reserves.

A comparison of the two years 1946 and 1956 gives convincing evidence of a rapidly expanding industry. In 1946 Canada produced 19,000 barrels of crude oil daily and had proved reserves of 45 million barrels. By 1956 production had risen to 467,000 barrels daily and reserves to 3 billion barrels. Natural gas reserves increased from 1,500 billion cubic feet to 23,000 billion cubic feet. Only 117 geophysical parties were employed in 1946 and the areas under investigation amounted to 20 million acres. In 1956 as many as 157 geophysical crews were employed and lands held by exploration companies totalled 200 million acres. Less than one million feet of drilling was done in 1946 and only 19 drillings rigs were active; in 1956 over 15 million feet of drilling was done in Western Canada and an average of 218 drilling rigs could be found in use throughout the year. By 1946, an all-time total of 393 oil wells had been drilled; in 1956 this number had reached almost 11,000. During the same period an oil pipeline system of some 6,000 miles had been constructed and petroleum refinery capacity had expanded from 245,000 to 700,000 barrels per day.

Expenditures have been large. During the period 1946-1956, over \$2½ billion were spent in exploration and development of oil and gas resources. Expenditures on pipelines, refineries, and marketing facilities have amounted to an additional one billion dollars, to give total expenditures of \$3½ billion.

In 1956 Canada was 60 per cent self-sufficient in crude oil and petroleum products, compared with less than 10 per cent in 1946. During the same period total demand for oil had increased three-fold due to the rising standard of living and the increase in population. It can be anticipated that the country's progress towards self-sufficiency will continue at a favourable rate, notwithstanding a continuing increase in total demand. That domestic demand will continue to increase is illustrated by the trend in motor vehicle registrations, from 1,631,000 to 4,218,000 in the 1946-1956 period, while the number of oil-heated dwellings rose from less than one-half million to 1,843,000.

Natural gas, which in 1956 accounted for six per cent of total energy demand in Canada, will be used much more extensively as the Trans-Canada gas pipeline and other pipeline systems go into operation. This will provide for more adequate energy supplies, particularly in central Canada, and it will also reduce the dependence on imported coal in that region.

Canada now has the second highest per capita rate of energy consumption in the world. Total energy consumption has increased 50 per cent since 1946. In that year, petroleum contributed less than one-quarter of total energy supply and natural gas about two per cent. In 1956 petroleum accounted for over one-half of Canada's energy supply. In 25 years it is expected that petroleum and natural gas will account for two-thirds to three-quarters of total available energy in Canada.

In 1956 the existence of a petroleum industry in Canada made possible a saving in foreign exchange of over one-half billion dollars for fuels which otherwise would have had to be imported. The benefit to Canada's balance of payments is expected to increase year by year as the rate of fuel self-sufficiency rises.

Against this background survey of recent progress, the following brief sections give an indication of the role of government in petroleum industry development.

II. Structure of Government in Canada

Canada is an independent nation, with a democratic parliamentary system of Government. Queen Elizabeth II, who stands as a symbol of free association among the nations of the Commonwealth, is, as Queen of Canada, the head of the Canadian State. Parliament consists of the Queen, the Senate and the House of Commons. Senators are appointed on a regional basis for life, and members of the House of Commons are elected by the people of Canada for maximum terms of five years. The executive power is exercised by the Cabinet, chosen by the Prime Minister from among his parliamentary supporters. He and his Cabinet colleagues are collectively responsible to the House of Commons. Canada's ten provinces have similar systems of cabinet government, with their premiers and legislative bodies.

Canadian courts of law are independent bodies. The Supreme Court of Canada is the final arbiter. Each province has its Police, Division, County and Supreme Courts, with right of appeal being available throughout provincial courts and to the Supreme Court of Canada. At the federal level there is also the Exchequer Court in which proceedings against the Crown may be launched. The Crown may use any court in a case against an individual but generally uses the Exchequer Court. There is also right of appeal from this court to the Supreme Court of Canada. All judges in Canada are appointed for life by the federal government except police magistrates who are appointed by the provincial governments.

Of importance to the petroleum industry is the right of appeal to a court of law from an order or direction made by a provincial government conservation board, and also the right to take a disputed income tax ruling before an appeal board and to the Exchequer Court and the Supreme Court of Canada.

III. Ownership of Mineral Rights

Under the British North America Act of 1867, a federal system was established in Canada with a strong central government and various provincial or local governments. The division of powers and rights as between the governing bodies was set out in Sections 91 and 92 of the Act, and among the powers granted to the provinces then in existence was the right to own and control their natural resources. However, Alberta and Saskatchewan, now the most important oil-producing provinces, did not receive the right at the time of their formation in 1905 and it was not until 1930, when the Natural Resources Transfer Agreement was passed, that these provinces acquired the right to administer their lands, mines, minerals and other resources. The various orders and regulations passed

by the Canadian Parliament which dealt with the administration of oil and gas resources in Canada from 1867 were consolidated into The Dominion Lands Acts of 1886, which act and the regulations passed thereunder were amended from time to time as conditions changed.

During the interim period while the Canadian Government was administering the natural resources of the Northwest Territories and later of the Provinces of Alberta and Saskatchewan, certain of the mineral rights were granted to individuals or corporations. The Hudson's Bay Company in 1869 surrendered the vast tract of land (1,481,000 square miles) given it at the time its charter was granted but was allowed to retain lands around its trading posts and one and three-quarter sections in every township. In 1881, the Canadian Pacific Railway was granted some 25 million acres in the three Prairie Provinces; and the Calgary and Edmonton Railway Corporation was also granted considerable acreage carrying mineral rights at a later date. Of grants to individuals there have been two principal types: homestead lands granted prior to 1887 and Soldier Settlement Board lands granted following the First World War. Both of these types of land grants carried mineral rights with ownership. Other than their grants to companies and individuals, the Crown holds title. Today the Province of Alberta controls the petroleum and natural gas in nearly nine-tenths of the lands of Alberta and the Canadian Government controls the rights on certain other lands, such as Indian reserves and parks. In Saskatchewan, land grants to companies and individuals, plus land rights held by the Canadian Government amount to 30 per cent, and the Province therefore controls mineral rights on 70 per cent of the provincial area. In British Columbia almost all of the mineral rights are reserved to the Crown but in Manitoba the provincial government holds title to only 25 per cent. The freehold land owner has the right of control of his properties in his own jurisdiction and may dispose of or develop them in any manner he sees fit, provided that he complies with the conservation laws.

In summary, there are two types of land in Canada - public (Crown) and private (freehold), in so far as mineral rights are concerned. Legal title to all Crown lands within the provinces, except Indian lands and National Parks, rests with the respective provincial governments, whereas the Canadian Government owns and administers the National Parks, administers the Indian reserves, the Northwest Territories and Yukon, and owns all public lands in the Northwest Territories and the Yukon Territory. Although the pattern of mineral resources ownership varies somewhat across Canada, the law governing ownership of mineral rights in each region of Canada is certain. The surface owner can readily determine whether he holds the sub-surface mineral rights, as the legal history on mineral ownership is clear and well-defined. Thus oil companies can rely on known and undisputable laws regarding land ownership, and, being assured that property rights will not be subjected to unpredictable change, they can proceed with long-term planning and investment to develop the country's oil resources. The continuity of its legal tradition has been an important factor in attracting sufficient capital to Canada to provide much-needed aid in opening up its petroleum resources.

IV. Procedures Used in Acquiring Petroleum Rights in Western Canada

Each of the oil and gas producing provinces of Canada has a set of regulations relating to the granting of rights to explore and develop oil and gas-producing properties

on Crown lands: The procedures, in principle, are quite uniform throughout Canada but each provincial government has incorporated certain provisions in its regulations to meet the particular needs of its own territory. The following notes set out the main procedures in Alberta.

Alberta

Arrangements for leasing and development of freehold rights are settled between the owner and the prospective operation but in general they involve similar commitments to those applicable to Crown lands.

To commence exploration, a prospecting licence must be obtained from the government. This licence is called a reservation of petroleum and natural gas rights, and it gives the applicant exclusive exploratory rights over a wide area, not exceeding 100,000 acres in each tract. A maximum of two such reservations may be held at any one time by a company, although a subsidiary company may also hold reservations and an assignment of any number of reservations may also be made to an operating company. Thus a company wishing to carry out large-scale exploratory operations may gain access to considerable areas of land.

The applicant must pay a fee of \$250 and post a deposit of \$2,500 for each 20,000 acres, or part thereof, as a guarantee of performance. A plan of the proposed exploratory program must be submitted. The term of the reservation is restricted to four months. However, if an exploratory program, satisfactory to the government, is carried out, then the reservation holder may secure two further successive four-month renewals, without any payment. Furthermore, following satisfactory performance during the first year of the reservation, the holder of the reservation may obtain up to eight more extensions of three months each by making specified cash payments. In the second year these payments amount to 7 cents per acre for the first and second renewals and 8 cents per acre for the third and fourth renewals. In the third year the reservation may be held - provided drilling is being done on the property - by payments of 10 cents, 15 cents, 20 cents and 25 cents per acre for the first, second, third and fourth renewals. Thus a company may hold a reservation for three years through the payment of an initial fee of \$250 plus extension fees totalling \$1.00 per acre. At all times an exploratory program, satisfactory to the government, must be continued.

If the operator obtains encouraging exploratory results he may wish to change his title from the reservation form to the lease form. He is only permitted to keep 50 per cent of the land under reservation in each township; the remainder reverts to the Crown. The maximum single lease which may be held is a two-mile by four-mile rectangle, or a three-mile square block, and no lease blocks may adjoin except at the corners. If oil is discovered in commercial quantities during the exploratory stages, the reservation holder must convert to lease within three months.

A variation of the reservation system is that of the drilling reservation. This may be purchased at a government sale under terms which require the drilling of a test well to a specified formation. The highest bid, plus a fee of \$250 and six months rental at 25¢ per acre, gives title to the drilling reservation. This title may be further extended for five periods of six months each, provided an

exploratory program satisfactory to the government is carried out and a payment of 25 cents per acre is made on each renewal. If the exploratory program is unsuccessful, conversion to lease is carried out.

Still another means of obtaining petroleum rights is through sales by the Mining Recorder. These sales of petroleum and natural gas rights take place for lands up to 10,000 acres in area which consist mainly of cancelled leases together with an equivalent amount of Crown reserve land from the same township. Following a sale, in which title goes to the highest bidder, the land so acquired must be converted to lease. At the time of receiving the application for lease, the government creates an equal area as a Crown reserve in the same township. If no tenders are received on a given parcel of land, the land is then made available for direct leasing.

Blocks of land, consisting of more than 10,000 acres, in which the petroleum and natural gas rights have reverted to the Crown, are periodically offered as reservations by public tender. Bids must include the full amount of the bonus payment offered plus a \$250 fee and a deposit of \$2,500 for each 20,000 acres to be included in the reservation. Should no bids be received, the petroleum and natural gas rights are made available for application for lease or application for reservation, as outlined at the commencement of this section on Alberta regulations.

Once a lease is obtained, by means of one of the procedures previously described, it may be held for 21 years, renewable for further terms of 21 years so long as the location is capable of producing petroleum or natural gas in commercial quantities. Payment of an annual rental of one dollar per acre is also required. There are specific regulations to ensure that the lease-holder operates his oil property in the most efficient way possible and in accordance with the best interests of the people of the Province.

Natural gas exploration is now attracting much attention and certain special provisions have been established to encourage the development of this resource.

To ensure that the holder of surface rights may be adequately compensated for the surface privileges given the oil company, and for any damage done, the Government of Alberta has established a Right of Entry Arbitration Board to deal with any disputes. In most instances, however, satisfactory arrangements can be reached through direct negotiation between the oil company and the property owner.

Other Provinces

Saskatchewan grants exploratory permits on areas up to 10,000 acres for a period up to three years. Its other procedures of granting petroleum and natural gas rights follow a similar pattern to that developed in Alberta and oil companies operating in Saskatchewan have found them equally acceptable. In British Columbia, much attention has been given by companies to natural gas development. Legislation established in that province gives particular consideration to the difficulties of conducting large-scale natural gas exploration in the rough terrain of northeastern British Columbia. In Manitoba, legislation is similar to that of other provinces, but special provisions have been granted to allow for the fact that the potentially favourable land area in this Province is considerably smaller than elsewhere in Western Canada.

All Acts and Regulations relating to land disposal in Western Canada are designed to ensure a continuously active exploration program and to provide an opportunity for any company to secure exploration rights.

V. Conservation

Another governmental jurisdiction in the Canadian oil industry occurs in matters relating to conservation. It is generally accepted in many oil-producing countries throughout the world that the state should intervene in the interests of conservation. The oil and gas conservation laws established in Canada are considered by many observers to be of a very high standard. As in leading United States oil producing states, there is an awareness of conservation in all oil activities from initial discovery to marketing.

In 1957 a new Conservation Act was passed in Alberta to replace the Oil and Gas Conservation Act of 1950. The new Act incorporates present day thinking on conservation from the engineering, economic and legal points of view. The new Alberta Conservation Act has the following objectives:-

- (a) to effect the conservation of the oil and gas resources of the Province;
- (b) to prevent the waste of the oil and gas resources of the Province;
- (c) to secure the observance of safe and efficient practices in the locating, spacing, drilling, equipping, completing, reworking, testing, operating and abandonment of wells and in all operations for the production of oil and gas; and
- (d) to afford to each owner the opportunity of obtaining his just and equitable share of the production of any pool.

The administration of the Act is carried out by a Conservation Board which is free of any political influence. The purpose of the Board is to ensure that oil and gas resources are developed and produced in accordance with the best conservation practices. It may accomplish this objective through regulations or orders. Its powers extend to well spacing, drilling, completion, abandonment and prorationing. The Board also functions through drilling and production regulations made pursuant to powers granted in the Conservation Act.

There is also a Conservation Act in Saskatchewan. Conservation is controlled in other provinces through provisions of provincial Mines Acts.

VI. Government Research

Although government does not participate directly in the petroleum industry, it affords valuable aid through research programs of a scientific and economic nature. For over 100 years the Geological Survey of Canada has done geological mapping in Western Canada. Provincial governments more recently also have had parties in the field. The results of field investigations are published in Memoirs and made available to any interested person or company. Laboratory investigations are also conducted involving the analysis and processing of hydrocarbons. Economic studies relating to costs of oil field operations and marketing prospects are carried out from time to time.

VII. Royalties

Crown royalty is computed on a sliding scale formula in Canada. Royalty rates vary somewhat from province to province but the procedure of computing the royalty on actual well production is standard.

The following rates prevail:-

Alberta and British Columbia

<u>Total Monthly Production</u>	<u>Crown Royalty</u>
0- 600 bbls.	5 per cent of number of barrels produced.
600- 750 " 30 bbls. \neq	14 " " " " " " " " " " over 600
750- 950 " 51 bbls. \neq	17 " " " " " " " " " " 750.
950-1150 " 85 bbls. \neq	18 " " " " " " " " " " 950.
1150-1500 " 121 bbls. \neq	19 " " " " " " " " " " 1150.
1500-1800 " 121 $\frac{1}{2}$ " " " " " " " " " "	
1800-4050 " 225 bbls. \neq	20 " " " " " " " " " " 1800
4050 and over	16-2/3 " " " " " " " " " "

The Royalty on natural gas in both of these provinces is 15 per cent of the selling price but not less than $\frac{3}{4}$ cents per thousand cubic feet. For sulphur and other hydrocarbons, the rate is 12 $\frac{1}{2}$ per cent.

Saskatchewan

<u>Total Monthly Production</u>	<u>Crown Royalty</u>
0- 900 barrels	5 per cent
900-1200 "	6 " "
1200-1500 "	7 " "
1500-2100 "	8 " "
2100-2700 "	9 " "
2700-3300 "	10 " "
3300-3900 "	11 " "
3900-4500 "	12 " "
4500-5100 "	13 " "
5100-6000 "	14 " "
6000 and over	15 " "

The royalty payable on natural gas is at the rate of 5 per cent of the sale value, with a minimum of $\frac{1}{2}$ cent per thousand cubic feet.

Manitoba

The royalty on all well output, other than natural gas, is 12 $\frac{1}{2}$ per cent. The royalty on natural gas sold is 12 $\frac{1}{2}$ per cent of the selling price, but not less than $\frac{1}{4}$ cent per thousand cubic feet.

VIII. Taxation of the Petroleum Industry

Corporation Income Tax

Taxable income is computed from total income from all sources, inside or outside Canada, including all business and property income. For corporations, the basic income tax rate in respect of income earned on and after January 1, 1955, is 18 per cent, if the amount taxable does not exceed \$20,000, and 45 per cent on the excess over \$20,000. An additional tax of 2 per cent is added to these rates under the provisions of the Old Age Security Act.

In computing taxable income, deduction from gross income include dividends received from Canadian resident taxable corporations, capital profits, business losses - within certain limits - sustained in the five years preceding and the one year immediately following the tax year. Where a province levies income taxes, a tax credit is provided in respect of the taxable income earned in the province, where a province levies a special tax on income derived from mining operations, a portion of the tax is allowable as a deduction in computing income. Capital cost (depreciation) allowance of 30 per cent is permitted for gas and oil well equipment; a rate of 10 per cent is permitted for oil storage tanks; and 6 per cent for pipelines, except where reserves may be exhausted within 15 years in which event the depreciation rate is 20 per cent. To compensate for the exhaustion of a natural resource, a depletion allowance of 33-1/3 per cent of the profits attributable to the production from an oil or gas well is allowed. The depletion deduction may be made as long as production continues, regardless of the cost of the oil or gas property. It is computed on the profit remaining after the deduction of exploration and development allowances and after providing for the depreciation of fixed assets. Bonus payments to the Government of Canada or to a provincial government, as made for oil and gas rights in Crown leases which turn out to be unproductive, may also be deducted in computing taxable income. Of considerable importance in opening up Canada's hydrocarbon resources is the provision allowing for the deduction of exploration, drilling and development expenses incurred in the search for petroleum and natural gas. The various allowances and other matters relative to oil and gas taxation are set out in the Income Tax Act. Questions relating to the interpretation of any part of the Act should be referred to the Department of National Revenue, Ottawa.

Excise Taxes

Excise taxes are imposed on certain specified goods whether manufactured or produced in Canada or imported into Canada. The list of items so taxed includes automobiles, motorcycles, rubber tires and tubes, fountain pens, jewellery, etc.

Sales Tax

A sales tax is levied on all goods, with certain specified exceptions, produced or manufactured in Canada or imported into Canada. The tax amounts, in the case of Canadian-made goods, to 10 per cent of the producer's or manufacturer's sale price, and in the case of imported goods to 10 per cent of the duty-paid value. Generally speaking, machinery and equipment that is actually used exclusively in the search for and production of oil and gas is admitted duty and sales tax free, and similar goods produced in Canada are also exempt from sales tax.

Customs Duties

An Act known as the Customs Tariff specifies that customs duties shall be paid on goods imported into Canada. Under Tariff Item 848, all machinery and apparatus, including motive power, used exclusively in exploratory or discovery work, development, depletion, and production of petroleum or natural gas wells, and also steel casing, tubing and drill pipe, used in connection with such operations, is exempt from duty. Such merchandise is also exempt from sales tax as being for the production of goods. In some cases, free entry is specified for articles of a class or kind not made in Canada,

When pipes, valves, fittings and tools are used in transmission systems, or elsewhere, on the oil lease, other than at the well-site, a customs duty may apply.

The Canada-U.S.A. Reciprocal Tax Convention

This tax convention was set up to eliminate or minimize double taxation by the United States and Canada. Thus there is in the convention a means of ensuring that the threat of double taxation will not be present to discourage the entry of American capital for the development of petroleum resources when it is required.

IX. Company Participation in the Petroleum Industry

A company carrying on work in the petroleum industry may hold either a federal or a provincial charter. The former permits Canada-wide operations; the latter restricts the company to the province in which the charter is held. Certain provisions of the Companies Acts in Canada call for an annual summary of company business and there is careful supervision of other company affairs to ensure that the public interest is upheld.

To encourage participation in Canadian business by citizens or corporations of other countries, provision is made for such interests to carry on business in Canada by any one of four methods: through the incorporation of a limited liability company, as a branch office of a foreign corporation, by setting up a wholly-owned subsidiary corporation for the handling of Canadian business only, or in the form of sole proprietorships and partnerships.

In the case of a limited liability company, an annual shareholders' meeting must be held in Canada not later than four months after the close of the fiscal year. At that meeting, a balance sheet, a statement of income and expenditure, a statement of surplus, and an auditor's report to the shareholder must be submitted for the fiscal year under review. Complete company records must be kept and they are subject to be open for inspection by the shareholders and the creditors. For federal incorporation, the fee varies from \$100 for authorized capital of \$50,000 to \$400 on authorized capital of \$500,000 plus 20 cents for each \$1,000 in excess of \$500,000.

A Canadian branch of a foreign corporation is obliged to keep proper accounting books and records, and to file tax and other returns required by the Government of Canada, provincial and municipal authorities - similar to those returns required from companies incorporated in Canada. A branch of a foreign corporation is subject to income tax on that part of its income earned in Canada and is also subject to the same rules and regulations as incorporated companies. The setting up of a wholly-owned subsidiary corporation in Canada, with head office in a foreign country, is generally preferable to operating a Canadian branch, particularly from the standpoint of a segregation of income and disbursements. However, the limited liability company operation is now being encouraged in preference to either of these forms. Sole proprietorships and partnerships are not common in the petroleum industry in Canada.

X. Financial Aspects of Petroleum Development

It is the policy of federal and provincial governments in Canada that petroleum and natural gas resources are to be developed by private enterprise. All phases, from exploration through to marketing, are financed by industry. Possibly the only exceptions are the natural gas distribution activities of the Saskatchewan Power Corporation, a Crown company of the Government of Saskatchewan, and the role of the federal government in building part of the Trans-Canada natural gas pipeline. The part of the Trans-Canada line being built by the federal government will be turned over to Trans-Canada Pipe Lines Limited as soon as the company is able to purchase it.

Certain institutions provide assistance to companies in finance matters. Prominent among these are Canadian banks. There are nine chartered banks in Canada all of which operate under Government charter and in accordance with provisions of The Bank Act. Under Section 82 of The Bank Act, "production loans" may be granted to oil companies actively engaged in drilling for oil and gas. Such loans make funds available for immediate use in anticipation of future proceeds of the sale of production. A company with limited cash resources may thus borrow against its future production in order to provide ready funds for its current program. The company must, however, have other developed and producing properties with sufficient reserves adequately to secure its loan obligation. Under Section 86 of The Bank Act, equipment and supply companies servicing the oil industry may borrow against existing inventories. A petroleum refinery may borrow against the security of its crude oil and petroleum products inventories, under terms of Section 88. Drilling contractors and geophysical companies may borrow from the bank against an assignment of accounts receivable. A Canadian company operating as a subsidiary of a foreign corporation may finance its operations under certain circumstances by borrowing from the bank under the guarantee of the parent corporation. Oil companies who have arranged a public stock issue may obtain a short term bank loan against an assignment of the proceeds of the underwriter's sale of their shares and/or debentures. In general, most bank lending to the oil industry in Canada is of a relatively short term variety.

Trust companies also have an important role in petroleum financing in Canada. Canadian banks, by law, are not permitted to provide trustee service, this work being allocated to trust companies. The trust company acts as a stock transfer agent or registrar when an oil company creates its capital and makes a public issue of common, preferred or other shares. As a transfer agent, the trust company keeps accurate records of the issuance of share capital and up-to-date particulars of changes in share ownerships. Other services relate to distribution of dividend cheques and the convening of shareholders meetings. Trust companies are also active in matters concerning oil royalty distribution. One of their most important functions is that of trustee when financing is undertaken by raising capital through borrowings from the public or from other companies or institutions. Through these and other specialized services, trust companies (which are not in any way affiliated with government) play an important role in petroleum financing,

The services of brokerage and investment firms, available to all business enterprises in Canada, are used by oil companies in their equity and long-term loan financing operations.

An examination of sources of funds employed by the petroleum industry in Canada during the period 1946-1955 showed that funded debt (bonds, debentures, sinking fund notes and bank loans) accounted for 33 per cent of all funds supplied; equity stock (common and preferred stock) totalled 15 per cent; parent companies supplied 18 per cent; retained earnings used for re-investment were the equivalent of 29 per cent; and the sale of assets brought 5 per cent. There was thus a good representation of all financial sources in raising the huge sums of money required during this period of Canadian petroleum development. It is to be noted that all monies in this period came from various industry sources; there was no government participation. Aside from the recent participation in the Trans-Canada natural gas pipeline, and relatively minor activity in natural gas distribution in one of the provinces, there is no indication of government taking part in petroleum financing in Canada at any time in the future.

It is also of interest to note that 64 per cent of all expenditures were allocated to the exploration and producing phases of the industry during the period reviewed.

XI. Trade Policies Governing the Petroleum Industry

Government petroleum policy in trade matters is concerned principally with natural gas. Although there is direct control of the export of crude oil and petroleum products across provincial and international boundaries, the firm policy concerning the export and import of natural gas has been the most important trade policy matter of recent years.

This policy was set in March 1953, when the Minister of Trade and Commerce announced in the House of Commons that permits for the export of gas would not be granted "until such time as we are convinced that there can be no economic use, present or future, for that natural gas within Canada". This policy led to the building of the Trans-Canada pipeline from Alberta to Montreal entirely through Canadian territory, thus ensuring that this most important transportation link between the gas fields of Western Canada and the markets of Ontario (a fuel-deficient region) would be entirely within Canadian control. As the all-Canadian route was not, on a short term basis, as economic as a route through heavily populated areas of northern United States, government policy in 1956 provided for assistance to the Trans-Canada project through the construction by a Crown company of the difficult section of the pipeline through northern Ontario.

Control of the movement of oil and gas across international boundaries is provided for in The Exportation of Power and Fluids and Importation of Gas Act. This Act, passed in 1955, removed an authority in the previous Act which could impose export duties on gas, oil and other fluids, retaining only the right to place an export duty on exports of electric power. Furthermore, the new Act contains only the right to revoke export licences if there is a refusal or neglect to comply with terms of the licence; formerly an unrestricted authority to revoke a licence was held by the

federal government. In applying for a licence to export power, oil or gas, or any other fluid, or to import gas, the applicant must establish that he has the approval of provincial authorities and of the Board of Transport Commissioners for Canada; the Minister of Trade and Commerce may then grant a licence under the Exportation of Power and Fluids and Importation of Gas Act.

Each province and the federal government supervises construction and operation of pipelines through the authority of a Pipe Lines Act. The federal Act applies to all pipelines crossing interprovincial or international boundaries. Provincial and federal authorities must be satisfied before granting a permit that a pipeline has adequate reserves to serve it and suitable market outlets, and that it can be adequately financed. The various provincial and federal statutes relating to pipeline transportation thus assure that the enterprise proposed is in the public interest. An oil line may be declared a common carrier. A natural gas pipeline company may be directed to extend its services.

Crude oil is an important item in Canada's trade. Always a major commodity of import, it continues to be brought in for the large Montreal refinery market while crude oil export markets are being built up in the Pacific Coast States of the United States and in some of the mid-western States. The flow of crude oil is to markets giving the best and most assured financial returns. Marketing arrangements are carried out entirely between purchaser and producer, the oil pipeline company being merely a transporter. Except in the matter of prorationing of production to market demand, there is no government intervention in crude oil trade. The role of the federal government is to promote, through regular trade channels, interest in Canadian crude oil but the individual trade arrangements are made by the companies concerned. At present Western Canada crude oil is not competitive with Venezuelan and other foreign crudes in the Montreal market, and it has not been the policy of government to impose tariffs on imports in an attempt to make Canadian crude competitive in that market.

With a production potential almost double the current production of crude oil, larger exports, as well as increasing domestic markets, will be important objectives of the industry during the next few years.

XII. Conclusion

The Canadian petroleum industry has grown rapidly during the past ten years and is now an important part of the country's economy. This recent period of expansion came after many years of disappointing search. Canadian oil resources are in no sense as prolific as those of the Middle East, but very large expenditures and the application of the best scientific procedures have brought good results. The industry, with its more than 400 oil companies, is highly competitive. In their willingness to participate in intensive and costly exploration programs, oil companies have demonstrated their faith in Canada's petroleum resource potential and also in the stability of the country's economic, legislative, and political environment.

