THE LEGAL AND ADMINISTRATIVE REGULATION OF THE PETROLEUM INDUSTRY IN TRINIDAD AND TOBAGO: A STUDY OF LAW AND POLICY IN PETROLEUM DEVELOPMENT

by

© Kameel I.F. Khan: LL.B. (U.W.I.), LL.M. (London)
of the Inner Temple, Barrister-at-Law

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Doctor of Civil Law

Institute of Comparative Law
McGill University
Montreal
March 1984

SHORT TITLE

PETROLEUM DEVELOPMENT IN TRINIDAD
A LEGAL AND ADMINISTRATIVE ANALYSIS

To Julia

ABSTRACT

This work has, through an in-depth assessment of the law and institutions employed in the petroleum industry in Trinidad and Tobago, evaluated their viability in achieving declared state objectives and in providing a legal and administrative framework for regulating this industry.

After considering the evolution of laws, policies and institutions the work has focussed mainly on the petroleum contract, the national oil company, taxation of petroleum operations and the ways of integrating the industry into the national economy and achieving an effective transfer of technology. These central areas are examined from a policy perspective which looks at their role, inter alia, as instruments of development, for securing active state participation, in the creation of an efficient and effective regulatory infrastructure and in allowing an optimum development of the resources, in the interest of the state. Further this examination provides the basis for suggested reforms and improvements to the existing model.

RÉSUMÉ

La présente thèse porte sur le droit et les institutions juridiques reliés à l'industrie pétrolière de Trinidad et Tobago. Elle cherche à évaleur si ce droit et ces institutions permettent à l'État d'atteindre les objectifs qu'il a énoncés et dans quelle mesure ils créent une structure juridique et administrative efficace pour la réglementation de l'industrie.

Après avoir fait l'historique des lois, des politiques et des institutions la thèse s'attache à l'étude de quatre domaines essentiels: les contrats d'exploration et d'exploitation, la société nationale de pétrole, les règles particulières de fiscalité pour l'industrie pétrolière, et les moyens adoptés pour intégrer l'industrie à l'économie nationale et pour atteindre l'autonomie en matière de capacité de production. La thèse étudie ces domaines centraux dans la perspective du développement économique, de la participation de l'État, de la création d'une infrastructure réglementaire et du développement national des ressources pétrolières. Enfin, la thèse préconise des réformes et des améliorations.

ACKNOWLEDGEMENT

This dissertation would not have been possible without the assistance of many people and institutions. It is very difficult to investigate an area which is as secretive and big business oriented, when one is merely a doctoral student.

I wish to thank officials of the Ministry of Energy and the Ministry of Finance of Trinidad and Tobago and their library staff. Also, Dr. Pedro Van Mens of Van Mens and Associates, Ottawa, Ontario for the use of his comprehensive library and his incisive interviews.

While in New York, the United Nations Centre on Natural Resources Energy and Transport and the United Nations Centre for Transnational Corporation were invaluable to my research. Also, Dr. Charles Heller, petroleum consultant, a man with a very indepth knowledge of the Trinidad industry.

The staff and Director of the Institute of Comparative Law and the staff of the law library for their warmth and helpfulness.

Last but not least, my supervisor, Professor Ethel Groffier-Atala, for her wise counsel, understanding and direction in bringing this work out.

My brothers and sister and parents for their love and encouragement when the light seemed even further in the distance.

To my wife Julia, who inspite of her own doctoral research, edited and proofread the entire work.

STATEMENT OF ORIGINALITY* (This statement is given pursuant to Para. 6., Guidelines concerning Thesis Preparation p. 6, revised April 1982, Faculty of Graduate Studies and Research).

This work can be considered as a contribution to original research for the following reasons:-

(1) No indepth examination has been undertaken by a lawyer, which seeks to critically examine the legal and administrative regulation of the petroleum industry in Trinidad and Tobago.

(2) It makes a contribution to the nascent area of Energy Law which is now in the process of defining principles involved in its operation.

(3) It makes a country study on the petroleum industry in a Non-O.P.E.C. developing country.

(4) It seeks to provide the basic tenents of a model for use in developing the petroleum resources in a similar type economy.

(5) All existing works on the industry in Trinidad and Tobago are outdated by at least five years. This study helps to update existing policies and practices.

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INTRODUCTION

Petroleum constitutes an important capital asset to its owner but its economic value is realisable only when produced and marketed. Optimum access to the resource is therefore necessary. Consequently, petroleum rich countries seek as a basic state objective the maximum development of their resources in providing a major source of domestic revenue and foreign exchange earning.

It is essential in undertaking this development to provide a stable and efficient legal and administrative structure. Anything else, would constitute too significant a risk factor to the potential investor and in turn, can deter investment and development. Further, a proper and well-defined legal and administrative framework represents a strategy to development which uses mechanisms designed to secure state objectives.

It is with this in mind that the industry in Trinidad and Tobago was selected for examination. The strategy used represents that of a Non-O.P.E.C. oil producer and net exporter, which is also a developing country. The characteristic feature of this type of approach is the performance of developmental work by a multinational corporation, on behalf of the state. It brings technology, managerial and technical know how in addition to providing an infusion of risk capital. The need exists therefore, to balance the interest of the state with those of the multinational. Trinidad and Tobago is also unique as an area of study. It offers an example of an industry which has large foreign investment in production and refining and shows trends identifiable from an industry firmly established over time.

The usefulness of the research then, is twofold, that is

(1) It examines, analyses and suggests a model for the development of petroleum resources in Trinidad and Tobago.

(2) In so providing, it presents the salient features of a model which can be employed in a Non-O.P.E.C. oil producing developing country, with a similar resource base and developmental objective.

The primary aim of this work, however, is to examine certain important features of the legal and administrative structure used in developing the resources in Trinidad and Tobago. It also makes proposals for reform. In examining these features, a two fold purpose is intended. First, to assess their viability in achieving particular objective and secondly, to see whether they secure the primary overall objectives of the state in its resource development.

The dissertation examines four principal areas of regulation. These are, administrative, contractual, fiscal and sectoral development. For the purpose of this work, the primary objectives of the state would be identified as:-

1. Development of an efficient institutional arrangement suited to the mixed economy concept of public and private enterprise.

2. Utilisation of a contractual regime which allows active state participation in all aspects of petroleum development and acts as a mechanism for the acquisition of technology.

3. The use of a national oil company in mobilising state efforts particularly its entrepreneurial

4. Employment of a tax regime which facilitates petroleum development in a mature oil basin while optimising the state's share of the economic rent.
5. Diversification of the energy sector based on petroleum and energy based industries.
6. Securing an optimum development of resources in the interest of the state and the national economy.

The work consists of six main chapters and a conclusion. It begins by outlining the policy and structural framework within which the national industry is examined and traces the historical evolution of laws and institutions. There follows an investigation of the administrative structure used in running the industry. An important feature here, is the co-existence of public and private enterprises. Next, the work focuses on the legal and administrative regulation created by the oil contract. It then examines critically the use of the national oil company as an instrument of development. This presents the main features of the administrative and contractual regimes.

The second half of the work addresses the fiscal and sectoral development aspects of the industry. A major theme underlying the fiscal and non-fiscal policies and practices is the balancing of the conflicting interest of the state and investor. The emphasis of the work then changes from the production sector. A fundamental objective of sectoral development in the petroleum industry is to lessen the dependence of the economy on production in order to cope with a declining oil output. In looking at this diversification of the economy, the work analyses inter-sectoral linkage and the transfer of technology. Finally, an overview of the general findings of

the work are presented together with the main elements of the suggested model for reform.

In devising an approach to the study one had to properly define its scope. The primary area of study is Trinidad and Tobago but comparison is essential in investigating an international industry. The policies and practices of other Non-O.P.E.C. oil producing developing countries provides meaningful insight into trends, common approaches and the use of innovative techniques. In this respect, comparison with the regulations in Peru, Guatemala Malaysia, Brazil and Angola proved particularly instructive. Comparison was also made with other oil producing countries such as Norway, Canada, Nigeria and the United Kingdom where their practice represented an innovative or recommendable technique.

In conclusion the researcher should make known the limitations and constraints of researching the work. Indeed, these were largely responsible for the greater effort required by the researcher.

The major constraint in examining the local industry was information. It appeared that nowhere or no one possessed a complete overview of the industry and a perspective for its development. This presented itself in the absence of any national energy plan which represented a declaration of well-defined objectives, policy and a strategy for development. In fact, no serious governmental study of the industry has been commissioned in the last twenty years.

Therefore, this perspective had to be pieced together from primary source material including, inter alia, budget speeches, white papers, legislation, parliamentary debates, statistical information and annual reports.

All organisational charts, tables, profiles and diagramatic illustrations used in the work were compiled by the researcher. State policy objectives, projections and government strategy had to be extracted from available materials and interviews. At times, due to the unavailability of a clear policy or stated practice the work is given to being theoretical. This can be considered a limitation at times.

Information on the international industry was more easily obtained, in spite of the secretive and confidential nature of some matters. The United Nations Centre on Transnational Corporations and the Centre for Natural Resources, Energy and Transport proved useful storehouses for information. This was particularly true in the case of literature on other developing countries. Another source of information was the Barrows Publishing Co., New York, which made available their comprehensive tabulation of oil laws, concessions, contracts, statutes and reports. A useful perspective of the international industry was provided by the incisive comments of private consultants and industry specialists who were interviewed. Indeed, this gave the work a scope and overview which otherwise would not have been possible.

It is now proposed to begin the study by looking at the main structures for regulating the national and international petroleum industry.

CHAPTER ONE: THE NATIONAL AND INTERNATIONAL EVOLUTION OF THE STRUCTURES FOR REGULATING THE PETROLEUM INDUSTRY

A. GLOBAL PERSPECTIVE

1. Transnational Petroleum Framework

Petroleum is indispensable to man. Although its use can be traced as far back as the East Roman Empire, the Middle Ages and the "Lamp Angelique" of the Frenchman Lange which lit up the Comédie Française during the play the Marriage of Figaro in 1874, it was really World War I which established oil as a strategic product. There began a search for strategic, abundant and reliable sources of oil which culminated in a Euro-American hegemony over all phases of the oil industry in the years ahead.

The transnational petroleum corporation which evolved was quasi-autonomous, vertically integrated and oligopolistic in structure and, in transcending national boundaries, created a supra-national economic order for petroleum relations. "International majors" and "international minors" as they came to be called,flourished in unparalleled proportions. The "majors" comprised Standard Oil in New Jersey, Royal Dutch Shell, Mobil, Texas Oil, Gulf Oil, British Petroleum and Standard Oil of California and by 1950 combined to account for eighty-five percent (85%) of total world production in addition to controlling the marketing, refining and transportation sectors.[1] More

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1. N. JACOBY, Multinational Oil, New York, MacMillan, 1974, p. 138-139.

revealing, however, was that during the period 1945-55, the "ten golden years" of the majors, the rate of return on petroleum investment was higher than in any other industry. However, this domination was not to last for ever. The post-war growth of oil consumption, U.S. tax incentives which allowed exploration cost to be shouldered by the government and the lure of a "Bonanza strike" saw the up-cropping of the "minors", smaller less global companies. These, though dubbed "newcomers", shook up the position of the "majors" and offered the oil producing countries an alternative in the late 1950's and 1960's.

At the same time, a new wave of nationalism sprouted in oil producing countries with the courting of ideas based on control and participation. Iran, a country in the vanguard of this movement, established a state oil company, National Iranian Oil Company and introduced service contracts in 1957 which relegated the foreign oil company to that of a contractor. Such action was also reproduced elsewhere with a view to controlling the country's natural resources for the national good. Perhaps the single most important event was the formation of the Organisation of Petroleum Exporting Countries (O.P.E.C.) in 1960 comprising substantial producers of oil, who exported some eighty-five percent (85%) of world oil and produced over seven million barrels per day. It was a body which sought more decision-making power, higher taxation and royalty income and a right of control over natural resources

for the optimim use of its people and country. This aspiration has also been reflected at the United Nations General Assembly which recognised "the inalienable right of all States freely to dispose of their national wealth and resources in accordance with their national interest."[2] The spate of O.P.E.C. nationalisations in the 1970s resulted in a rise of state petroleum companies controlling oil production and a declining role for the majors. A state corporation became an integral part of national petroleum policy. It was the concentration of financial, management and technical capability in one single national entity. Through the instrumentality of this body there developed "carried interest" participation as used in the North Sea, advanced service contracts as used, for example, in Brazil and Venezuela and production sharing contracts as exhibited in Peru, Trinidad, Nigeria, Oman, and Indonesia whereby the state was able to play a more useful and important role in the development of its resources. This participation also allowed a better spirit of compromise between the state and the foreign company.

It is evident at this point that the development and exploration of petroleum resources has two important players and their interests are very different. These players are the foreign oil company and the oil producing country. One may ask how do these interests differ and to what

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2. U.N. Doc. Gen. Ass. Res. 1803 (XVII) 14 Dec. 1962.

extent can they be reconciled? The foreign oil company has as its primary aim, profit maximisation and an adequate return on its invested capital. Its attendant but equally important concern is to have marketing outlets, a diversified source of supply, strategic and well located production in close proximity to expanding markets. It also seeks to preserve "captive markets" which allow for a controlling of future supplies by winning away concessions thereby pre-empting competition. A host country has very different needs, most of which are only obtainable through the multinational corporate network. It needs the capital infusion of multinational interest, sophisticated oilfield technology developed over years of research and experience, managerial skills to overseer and define such efforts and the marketing infrastructure afforded by multinational "downstream" affiliates.

Given such divergent interest, it is not uncommon for disagreement to result. A multinational oil company is normally only interested in a "leasing" or "renting" of its services while the host country is interested in a transfer of technology which decreases its dependence on the foreign company. Any legal framework which seeks to regulate this relationship must be one which is flexible, revisable and accommodating. It must be able to harmonise these different interests and provide mutually acceptable principles on which a working relationship could be founded.

2. Prices

No discussion on the petroleum industry is complete without an account of the oil price increases and market structure. The determination of oil prices cannot be left to the oil companies for it would be difficult to obtain a truly accurate and genuine figure. As global companies, operating at a transnational level, their collective influence allows them as a group or as single conglomerates to create an economic model which is involved in planning, development and policy, not for a single country but groups of countries or regions. Consequently, a central planning unit within a vertically integrated network dictates the basis of cost and price since there are no free market forces at work. Hence price, which is normally arrived at by consumer demand and supply, becomes a matter of "purely internal bookkeeping and accounting" and the demand-supply curve becomes irrelevant.[3]

Price setting is not new in the petroleum inudstry since during the fifties and sixties the "posted price" system was used in O.P.E.C. nations. This was an arbitrarily set price at which a seller offered oil for sale to the public and which included F.O.B. charges. However, the

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3. See generally, E. PENROSE? The Large International Firm in Developing Countries: The International Petroleum Industry, London, Allen and Unwin, 1968.

"new comers' as seen in the "international minors", together with the Soviet oil production served to open up the oil market which resulted in "price cutting" and an undermining of the "posted price" system. "Discounting" of posted prices, resulting from the intense competition and an oil glut on the world market, allowed for a return to a market determined price. An example of this was the delivered price, which represented the actual sales price to the refinery. This was a more correct indicator of the price of oil at this time and existed in the second half of the sixties.

The tumultuous era for O.P.E.C. petroleum price increases was really the decade of the seventies. In 1971, the Tehran and Tripoli Agreement increased the posted price for oil, augmented income tax and added a surcharge on each barrel of oil produced. Prices rose automatically as evident from Saudi Arabian LIght which jumped from $1:80 per barrel to $2:28 per barrel. The Geneva Agreement in 1972 was an understanding to further adjust the price per barrel of oil so as to accommodate the devaluation of the U.S. dollar on which oil prices were based. Two significant increases occurred thereafter. The first, in 1973, was as a result of the Yom Kippur War by which the ARab countries showed solidarity with Egypt. The second was the increase on January 1, 1974. The posted price now stood at $11.60 U.S. per barrel. Increases in direct Participation Agreements to sixty percent, from twenty-five, plus a royalty and tax increases in October, 1974 saw further increases in

oil prices. With such a large share of crude from participation agreements the governments were not obliged to sell to companies. They could now sell directly to third parties, at prices they themselves had fixed. In other words, they were now selling their own crude and could ask any price. Hence posted price was no longer important for free market conditions were in operation again.

From 1974-1979 the market stabilised. However, the Iranian revolution and the Iraq-Iran war saw new disruptions by mid-1979. These events created shortages and the price jumped again, to forty-five dollars on the spot market. This resulted in gross over production and oversupply and the price plummeted by mid-1980's to $28 per barrel. This last upheaval effectively destroyed the O.P.E.C. control over prices and its unity.

From here on it is fair to say that the O.P.E.C prices reflect spotmarket prices and there was no unity within O.P.E.C.[4] Uncertainty lies ahead and forecast suggest that O.P.E.C may not withstand the test of time.

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4. It is possible to putforward an argument that O.P.E.C. does not control oil prices but rather prices are dependent on the spot market variations. If one says that O.P.E.C. has not, in four attempts in 1965-66, Spring 1978, Sept. 1978 and May 1981, been able to reach agreement on a restriction on production, which is the only way it can control prices. The classic example would be in Jan. 1981 when Saudi Arabia oil was selling at $32 per barrel, African O.P.E.C. members were selling at $40 per barrel. The African producers had their prices reduced to $36 per barrel when the spot market price dropped from $45 p.b. to 36 p.b. For further discussion on this point see, A. JOHANY, The Myth of the O.P.E.C. Cartel, New York, Wiley and Sons, 1980.

3. International Agencies

With such spiralling cost for oil, there was a shifting of exploration activity to areas other than O.P.E.C. nations. Also, the need for developing countries to become more self-sufficient in energy needs assumed paramount importance. One has therefore, to see what opportunities are available for a country to develop its own resources.

It is said that petroleum development is both risky and expensive and perhaps an expensive luxury for many of the world's poor developing countries. Certain larger developing countries would be able to provide a budget, in the form of a percentage of their Gross National Product, for a relevant petroleum development and exploration programme without it being a serious drain on the national treasury. Other developing countries, even providing a larger percentage share of their G.N.P., would not be able to fund a programme of development. This is because it would still not be adequate for a relevant budget. A programme has to be of a certain minimum budget to be relevant.[5] Hence, multinational funding by international agencies together with technical assistance from more advanced countries would help in making such efforts possible.

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5. See generally, P.H. VAN MEURS, New Arrangements for Petroleum Exploration and Production in the Non-O.P.E.C. Developing World, 5th International Symposium on Petroleum Economics, 30 Sept. 1981, Dept. of Econ., Université Laval.

At the United Nations, the United Nation's Development Programme (U.N.D.P.) has been offering assistance mainly in the area of hard minerals.[6] In 1973, a special revolving fund for the exploration of natural resources was established under the auspices of the U.N.D.P.[7] and which started functioning in 1976. Under the terms of this fund, assistance is provided for exploration and economic appraisal for which there is no obligation to repay if there is no discovery. In the event of a discovery, there is a duty to make "replenishment contributions" at the rate of 2% of the output for a fifteen year period. These efforts, though limited, together with U.N. assistance through its other agencies[8] provide a facility for generating petroleum exploration and development.

The International Bank for Reconstruction and Development, I.B.R.D., or World Bank, has always taken the policy of not funding or assisting any petroleum development or exploration. This appears to have changed somewhat, for now there is financing on a modest level of petroleum production cost, for countries with a low per capita

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6. See U.N. Doc. Report of U.N. Sec. Gen. A/32/256, 16 Oct. 1978.

7. U.N. Doc. Gen. Ass. Res. 3167 (XXVII), Dec. 1973.

8. See "Activities of the U.N. and the Regional Commissions in Petroleum Technical Co-operation, Centre for Natural Resources, Energy and Transport", U.N. Doc. ES/NRET/AC.10/20.

income.[9] Exploration cost is not funded. Though this is a step in the right direction, it is unfortunate that similar assistance was not provided in the form of risk exploration loans or drilling funds. It is such limited assistance which is largely responsible for the piecemeal development which takes place at present. Also, the long awaited for "Energy Affiliate" has received another blow. The Reagan Administration has stated that it would "neither support the creation of nor participate in" this project on the grounds that it "could not sanction the principle of the affiliate borrowing from private capital markets in order to lend long-term to L.D.C. governments".[10] Again, one is confronted with the unavailability of multilateral assistance for energy development and the reliance on foreign private investment.

In the absence of continual and complete assistance on the multilateral level, countries have been turning to bilateral assistance as a means of exploring and developing their resources. Developing countries with much more developed technology in the petroleum sector such as India, Brazil, Argentina, Algeria and Mexico have all been

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9. See, WORLD BANK, "A Programme to Accelerate Petroleum Production in the Developing Countries", Washington, 1979. Also note, U.N. Doc. Gen. Ass. Res. 32/176, Dec. 1977 and Res. 32/194, Jan. 1979.

10. Petroleum Legislation: Petroleum Taxation, Supplement 71, New York, Barrows and Co., p. 1, hereinafter cited as PL/Petrol. Taxation, Supp. 71.

involved in technical assistance agreements with other developing countries in the resource development projects. Countries of the Organisation for Economic Co-operation and Development (O.E.C.D.) have made available some funds for petroleum development but not for exploration. This policy is explainable if one remembers that most of the foreign private investment comes from this area. The Federal Government of Canada has undertaken an admirable policy of offering development aid through the state owned Petro-Canada Corportion[11] while State Oil of Norway has been active in a similar respect. Centrally planned countries of the Eastern bloc have also provided financial and technical assistance to certain countries.

4. Conclusion: Trends

The decade of the 1980's suggests a period of concern for the countries of the world, particularly the developing countries and within this group the non-oil producing developing countries.[12] Economic growth has always created increased oil consumption and with spiralling energy cost, weakening terms of trade for their exports and receding development assistance, the developing

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11. Jamaica and Nicaragua are two recipients.

12. See generally, A. LAMBERTINI, "Energy Problems of the Non-O.P.E.C. Developing Countries, 1974-80", (1974-1976) 11-13 Finance and Development, pp. 24-28.

countries would suffer the greatest budget deficits of all times.[13] The trend is that the developed countries, since the oil crisis in 1973, have embarked on policies to reduce their dependence on imported oil. Indications are that they are succeeding. Hence, without increased transfer of technology, special arrangements for poorer countries and more development aid for countries to realize their energy resource potential, the future looks bleak.

B. NATIONAL PERSPECTIVE

1. Evolution of Industry

Trinidad is one of the oldest petroleum producing countries in the world. The 1857 drilling of a 280' well by the Merrimac Oil Company in the southern part of the island, predates the 1859 drilling of Captain Drake in Titusville, Pennsylvania which is credited as the earliest oil well drilling project. Oil attracts business enterprise and it was not surprising when an enterprising American, Walter Darwent, floated the Paria Oil Company in 1865 with a share capital of $9,200 in fifty dollar shares. It was un unsuccessful venture and though the Trinidad Petroleum Company, a British interest, was founded in 1867, the

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13. One can recall the outright bankruptcy and loan defaulting as happened in Mexico. See Time Magazine, 20 Sept. 1982, "Jittery Bankers", p. 56.

next thirty years was a dormant period since no production or exploration took place.

An administrative structure was needed to overseer resource development and in 1904 a Mines Department, a branch of the Public Works Department, was set up under the colonial civil service system. The colonial policy meant leaving development to private enterprise while being content to collect the tariffs which were taken in the form of royalties. Interested parties, however, were discouraged by the backward infrastructural development which was a formidable hurdle in petroleum exploration. From 1908, the year credited with the beginning of commercial production, the local industry began to progress. In 1910, a small export cargo was dispatched and 1912 saw the construction of a refinery in the south of the island. Between 1910-1914, over thirty small companies were registered but lack of money and equipment together with the World War, severely restricted their activities. Nevertheless, production reached one million barrels per year in 1914 with approximately sixty six percent (66%) of this local crude being refined locally by 1919.

The decade of the 1930's witnessed the Great Depression and the discovery of oil in Oklahoma City and the East Texas fields, which caused an overproduction in the U.S. and a reduction in world prices. By 1930, petroleum and its products accounted for some fifty (50%) percent of total domestic exports, having risen from a

previous three percent (3%). In 1915, crude oil reached the ten million barrel per year mark. In 1940, this improved to twenty-two million. Petroleum created prosperity and the contributions of the oil companies by way of taxation and royalties together with the spin-off flow of money through salaries, payments to contractors and purchases of goods and services helped to generate economic growth and infrastructural development. Such was the evolution of the petroleum industry during its first fifty years.

After a period of stabilisation of production, the Soldado field in the Gulf of Paria was discovered in 1954. This was a mammoth discovery. Exploratory drilling in the previously non-productive Guayaguayare area yielded the Navette field and together with new discoveries in the North and East Soldado fields production reached sixty-seven million barrels in 1968. A downturn period again occurred but significant discoveries off the East Coast by the Amoco Oil Company again created another oil surge. Since then there has been another period of calm in the cyclical ebb and flow pattern which has characterised the local industry. Needless to say, there is great need for new productive discoveries presently.

In the refining sector, the country has two large refineries, Texaco, one of the ten largest in the world and Trintoc which has a refinery capacity of one hundred thousand barrels per day. Total refinery throughput capacity is four hundred and fifty thousand barrels per day. In

addition to some local crude, the greater part of the refinery capacity is taken up with the refining of crude oil from Saudi Arabia, Indonesia, Libya, Iran, Venezuela, Angola and Nigeria. Refinery throughput is heavily biased in favour of the production of residual fuel oil intended for markets in the U.S.A.. This was the main reason for the construction of a desulphurisation plant in 1972, to meet the U.S. 2.7% sulphur standard for imported refined products. In the recent times the energy crisis has had a significant effect on local refineries, which continue to operate well below capacity.

The oil industry is the mainstay of the economy accounting for some eighty-five percent of exports and two billions (U.S.) dollars annually to the treasury. This is not matched by its workforce which remains a paltry five percent of the population with local and foreign companies providing independent services such as drilling and well servicing. Oil production reached its climax in 1980 with annual production of eighty-three million barrels or roughly two hundred and twenty-nine thousand barrels per day. The main source of this remains marine production which outstrips land production in a ratio of 80:20. American companies dominate the local oil industry in a move away from British interest which started as far back as 1956 with Texaco Inc. Presently, AMOCO, a local subsidiary of Standard Oil of New Jersey is the main producing company. Tesoro, a small Texas' company has joint venture interest

in Trinidad-Tesoro with the government while TRINMAR is a consortium of Texaco, Tesoro and TRINTOC, the national oil company. TRINTOC was formed as a result of a government takeover of Shell Trinidad Ltd. in 1974. Trinidad-Tesoro was formed in the aftermath of the acquisition by the government and the Tesoro Petrol. Co. (U.S) of the interests of British Petroleum.

In the area of natural gas, the state has always played down its use and importance because of the pre-eminence of oil as a revenue earner. However, with depleting supplies of oil and the planned diversification of the economy by large scale industries based on natural gas resources, called the Point Lisas Project, this product has acquired an importance which supersedes that of oil. Interestingly, natural gas was found in commercial quantities as far back as 1908 but its use for fertilisers and electrical generators really started only in 1958. Presently, about one-third of the realised gas is "flared", one-third goes to the Natural Gas Company, established in 1974, for industrial distribution with large quantities going for electrical generators and most of the rest for secondary recovery of oil. The present production is fifteen million M3d. This gas is now piped through cross island pipelines to the Point Lisas Project from the eastern and southern parts of the island.

It is well known that in addition to secondary and enhanced oil recovery, this gas can be used as a clean

source of fuel, a chemical feedstock and as a feedstock for energy export industries such as liquidified natural gas. It is foreseeable that natural gas would by-pass oil in importance to the economy unless significant discoveries of the latter are made.[14] The major industrial diversification efforts to date has been in the gas related industries.

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14. See generally, White Paper on Natural Gas, Govt. of Trinidad and Tobago, 16 Jan. 1981. The estimate reserve of gas is 14:01 trillion cubic feet.

TABLE I: CRUDE OIL PRODUCTION 1970-1980

Source: White Paper on Natural Gas, Gov't. of Trinidad and Tobago.

Annual Crude Production	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	19
Million of barrels	51.0	47.1	51.2	60.7	68.1	78.6	77.7	83.6	83.8	78.2	80
Mill. Cubic Meters	8:1	7:5	8:1	9:6	10:8	12:5	12:3	13:3	13:3	12:4	12
Daily Ave. Crude Oil	139.8	129.2	139.9	166.2	187.7	215.4	212.2	229.1	229.5	214.4	219.
Thousand Cubic meters/day	22:2	20:5	22:5	26.4	29:7	34:2	33:7	36:4	36:5	34:1	34:

TABLE II: CRUDE OIL PRODUCTION 1980

Oil Producing Companies in T.T.	Crude Oil Production 1980	Crude Oil Prod. for 1980 (cubic meters)	Percentage (%) Total Productio
AMOCO T'DAD Oil Co. (Amoco)	119:994	19:078	56:6
Texaco T'DAD Inc. (Texaco)	18:681	2:970	8:8
TRINIDAD Northern Areas (TRINMAR)	39:661	6:306	18:7
TRINIDAD-Tesoro Petro. Co. Ltd. (Tesoro)	24:866	3:953	11:7
Premier Consolidated Oilfields Ltd. (P.C.O.L.)	29:8	47	0:2
TRINIDAD & TOBAGO Oil Co. (TRINTOC)	8:558	1:361	4:0
TOTAL	212:058	33:715	100

Source: Ministry of Energy, Facts and Figures on the Petroleum Industry of Trinidad and Tobago.

2. Constitutional Development and History

(a) Evolution of Constitutional and Ministerial Structure

In 1797, Britain captured Trinidad from the Spanish and by the Treaty of Amiens, 1802, it was expressly recognised as a conquered colony and ceded to Britain. The effect of conquest meant that it became subject to the Legislature and Parliament of Great Britain.[15] The administration of the colony[16] was in the hands of a resident Governor. The island was a Crown Colony[17] with the Governor receiving instructions by orders from the Secretary of State for Colonies, who was the Governor's liaison with the British Government or by Orders-in-Council from the Privy Coucil. The British Parliament then, was the controlling authority.

In 1831, Trinidad received its first legislative body consisting of the Governor, six officials and six landlords and a purely advisory executive council which had the Governor, Attorney General, Colonial Secretary and Colonial Treasurer was also introduced. In 1889, Tobago

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15. See Campbell v. Hall, 1774 1 Cowp. 204, per Lord Mansfield.

16. See for definition of "colony" Interpretation Act, 1889 52 & 53 Vict., c. 63, s. 18(3) and Statute of Westminster, 1931, 22 Geo. 5, c. 4, s. 11.

17. See Stroud's Judicial Dictionary, Vol. 1, London, Sweet and Maxwell, (3rd ed.) 1952-53, p. 691.

joined with Trinidad.[18] This structure continued until 1924 when the Legislative Council was reconstituted,[19] it was enlarged and elected and nominated members were allowed to sit. It was the first time members were elected. The Governor retained an ultimate veto over every ordinance or bill, this asserted the residual power of the Crown. However, while the Crown possesses a plenary legislative power in a conquered colony, the grant of a representative legislature[20] without an express reservation of legislative power was interpreted as meaning that the Imperial Parliament has effectively divested itself of such power.[21] Legislation later corrected this common law interpretation by declaring that the representative legislature only possessed full power to make laws regarding the constitution and powers and procedure of the legislature.[22] The Crown retained the overriding right to make laws for the peace, order and good government of the Colony through orders-in-council and to hold as repugnant any colonial law

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18. Order-in-Council (U.K. Parl.) of 17 Nov., 1888.

19. Order-in-Council (Legislative Council) Trinidad and Tobago, 16 Apr. 1924.

20. S:5 Colonial Laws Validity Act, 1865, 28 & 29 Vict., c. 63 defines a "Representative Legislature" as one comprising an half elected legislative body. See generally, K. ROBERTS- WRAYS, Commonwealth and Colonial Law, New York, Praeger Pub. Co., 1968, pp. 157-158.

21. Campbell v. Hall, 1741 1 Comp. 204.

22. Colonial Laws Validity Act, 1865, s. 5.

which was contrary to an act of the U.K. Parliament which extended to the colonies.

The colonial government was comprised of a Governor, as representative of the Crown, who acted on their instructions as given in Orders-in-Council, Letters Patent and Instructions from the Secretary of State. An Executive Council operated as his advisory chamber in a similar style to the Privy Council while a representative legislature was responsible for making laws within the power prescribed for so doing.

This trilateral structure existed, with modifications throughout the colonial era. With the advent of universal adult suffrage in 1945 one saw in the years ahead an enlargement of the elected members and the embryonic growth of a Cabinet evidenced in the Orders-in-Council of 1950 and 1956. In 1959, an independent Public Service Commission was established to advise the Governor on appointments, promotions and dismissals of civil servants. In 1962, an Independence Constitution was granted which retained the basic existing structure of a bi-cameral legislature but introduced a Bill of Rights, citizenship provisions and an amending formula for the Constitution. The Governor-General was to be the representative of the Queen and Head of State but had to act according to ministerial advice. The law of the land was also laid down in the Constitution which states it to be:

> "The Common Law, Doctrines of Equity and Statutes of general application of the Imperial Parliament, which were in force in England on the first of March 1848 ... shall ... be deemed to have been introduced into, and enacted in the Colony on the first of March aforesaid."

On the attainment of independence in 1962, there existed a House of Representatives and an Upper House or Senate together with an independent judiciary and an Independence Constitution which laid down basic laws and rights.

(b) Present Constitutional, Parliamentary and Ministerial Framework

In 1976, Trinidad and Tobago was established as a republic for which a republican constitution was enacted.[23] There was the retention of the existing constitutional structure in the form of a bi-cameral legislature and independent judiciary. Such a structure showed an expression of the separtion of powers doctrine which has been the cornerstone of the inherited British parliamentary system based on the Westminster model in which there is a tripartite division between the legislature, executive and judiciary.

However, the division inherent in this transplanted structure has been rendered illusory by the lack of proper separation between the bodies. They are in fact not

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23. Act 4 1976, Constitution of the Common Republic of Trinidad and Tobago Act, 1976, hereinafter referred to as Constitution Act.

separate and independent but overlapped and intwined which allows the party in power to completely dominate the appointment machinery used in the allocation of offices in the respective sectors. It is for example, possible for a majority of Senators in the Upper House to be appointed by the Prime Minister or for Senators to be given ministerial responsibility in Cabinet. Such cross-appointment effectively joins the legislature and executive. The President, who replaced the Governor General in the new constitution, has somewhat wider powers and is appointed by a majority of the party in power. He then appoints the Chief Justice and members of the Judicial and Legal Service Commission which appoints the judges. Again, there is the overlapping of interest in appointments. One can question the use of the Westminster system. It is evident that such a diluted separation arises from the exporting of such a model to a country which does not have the social or political infrastructure to accommodate its being and provide the necessary checks for its abuse.

The executive authority is legally entrusted to the President who is the titular Head of State and unlike his predecessor the Governor General, is a functionary with power exercisable directly or through subordinate officers.[24] . In actual fact, the special executive caucus called the "Cabinet" which consists of the Prime Minister,

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24. Id., s. 74(1).

Attorney General and selected ministers, is the core of the executive body. This body is responsible for the "general direction and control of the government ... and shall be collectively responsible to Parliament."[25] The President in exercising his functions under the Constitution or any other law is made subservient to Cabinet in that he has to "act in accordance with the advice of the Cabinet or a minister acting under the general authority of Cabinet except if an unfettered power is given".[26] Therefore, the Cabinet operates as the supreme body presided over by the Prime Minster who is its single most important member while the President receives his instructions from this body. Inevitably, one would ask, to whom is the Cabinet responsible? The Constitution states that it is "collectively responsible to Parliament" which is more of a constitutional convention than a responsibility which is capable of precise definition. It does, nevertheless, denote a political responsibility to the larger House for matters involving national policies and programmes and their overall performance.

One is then focussed on the question of ministerial organisation and responsibility which ranks next in the hierarchical structure of authority. The British parliamentary model recognises collective and several

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25. Id., s. 75(1).

26. Id., s. 80(1).

responsibility and so the administration and implementation of Cabinet decided policy, for sectors of the economy, is then vested singularly in ministers of Government. The Prime Minister is responsible for advising the President on the appointment of ministers and the allocation of portfolios.[27] Ministers are individually responsible to Cabinet for the conduct of their department and may be made to answer in Parliament for similar matters. A Minister, then, is politically responsible and answerable and so protects the impartiality and secrecy of the civil service, which may have actually made the decision. In the performance of his duties a Minister is assisted by a Parliamentary Secretary or junior Minister who is also appointed by the President on the advice of the Prime Minister. Although his powers are not constitutionally defined he is supposed to act as a link between the Minister and the department, especially in larger or joint ministries. The majority itself operates on the basis of a division of labour. Legally, the Minister is to "exercise the general direction and control of the department"[28] but actual administration and daily supervision is in the hands of the Permanent Secretary, who is a public officer.[29] A ministry is comprised of various sections with section heads and a

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27. Id., s. 79.

28. Id., s. 85(1).

29. Id., s. 85(1).

staff. Heads of sections make up an inner circle of personal advisers to the Minister. Hence one finds a horizontal and vertical stratification within the civil service with the Minister at the helm and it is he who is imputed with having made decisions in a process which is secretive and screened.

The other chamber in the triad is the Legislature which is referred to as the Senate or Upper House. Unlike the Lower House or House of Representatives which is elected by popular franchise, this is purely a nominated body comprised of thirty-one members. Sixteen are appointed on the Prime Minister's advice, six on the advice of the Leader of the Opposition, with the President having a discretion in appointing nine members from economic, social, community or other fields.[30] The latter group are seen as representing interest which is not partly affiliated and so express views which are also necessary in the law making process. Essentially, the Senate is the body which debates and passes bills which are then assented to by the Head of Executive before they are recognized as law in the form of Acts of Parliament. In reality, the Senate, within the terms of the Constitution, has little power as a check on the Lower House since bills can be presented to the President for assent even if they were rejected by the Senate.[31] The power is essentially only one of delay.

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30. Id., s. 40(1).

31. Id., ss. 64(1)(a), 65(1)(2).

Lastly, one can look at the judiciary which completes the triangle and is the third body within the separation of powers doctrine. In brief, there is a Supreme Court of Judicature comprising the High Court of Justice and a Court of Appeal[32] with the judges, except the Chief Justice, appointed by the President on the advice of the Judicial and Legal Service Commission.[33] The Court is largely seen as the guardian of the Constitution and charged with the interpretation of an entrenched Bill of Rights and entrusted with the power of judicial review of legislation. Within the Court structure, an appeal lies of right from the the High Court to the Court of Appeal[34] while appeals to the Judicial Committee of the Privy Council lie in certain defined areas.[35]

In conclusion one can look at this model in relation to the national petroleum industry. The Parliament, Upper and Lower Houses, which is given the power to make laws for the "peace, order and good government"[36] would be responsible for the formulation and enactment of all laws relating to every aspect of petroleum operations. This

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32. Id., s. 99.

33. Id., s. 104(1).

34. Id., s. 108.

35. Id., s. 109.

36. Id., s. 53. See also, Ibralebbe v. R., [1964] A.C. 900 which interprets this phrase as one which gives extremely wide law-making powers.

would provide the legal framework for operations. In its capacity as the government, it would collectively or through ministers, enter into contracts on behalf of the state. The Cabinet would establish the policies and programmes for the optimum use and mobilisation of the country's natural resources within the national budget. These plans and policies would be the basis on which laws are formulated. Ministers and ministries are delegated the responsibilities for implementing the plans and laws and of providing the administrative infrastructure imperative for realising the theoretical framework. The Courts, lastly, would be the guardians of rights and the enforces of obligations and woud provide interpretation of national laws in important matters such as taxation, pollution, land use and have the power of judicial review of administrative action.

C. PETROLEUM POLICY AND ADMINISTRATION

1. Policy Before Independence under British Government Colonial Policies: 1902-1956

At the beginning of this century, when oil was developed and exploited in commercial quantities in the crown colony of Trinidad, the British Government sought to regulate its development so as to be of maximum benefit to the British economy. It was not a difficult task to achieve since the legal and administrative control of this resource was in their hands by virtue of being the colonial administrators. Consequently, the island's resources were

developed as an "oil province" within the Empire and the laws for its development reflected British policy and protected their interest.

Such protection of interest first manifested itself in the vesting of the subsurface right to oil in the Crown in 1902. Immediately, the government obtained control of all oil resources. They now had the power to restrict the award of licences and leases for its exploration and exploitation to those whom they approved of. In the process, a source of revenue for the treasury was to be derived from licensed operators. They would be liable for taxes and royalties. This action was not without parallel. At the same time the British Government took measures to control its oil mining operations at home by introducing the Petroleum (Production) Act 1918 which prohibited drilling, except if licensed by the Minister of Munitions.[37] This was in the era of World War I when petroleum was considered a commodity essential for the national interest and defence.[38]

The effect of vesting oil rights in the Crown in Trinidad was that a licensing framework for administering

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37. This was a compromise position passed under the Defence of the Realm Act, 1914, 4 & 5 Geo. 5, c. 29 for the original bill was not passed. That Bill proposed to vest in the Crown the exclusive right to search for and get petroleum, subject to a system of licensing administered by the Board of Trade.

38. Hansard Parliamentary Reports, House of Lords Debates, Vol. 91, Col. 673-4.

oil operations was created. Development was to take place in accordance with the dictates and interest of the Crown. This was evident from the legislation in operation. It was stated in the Trinidad legislation, that development of the resources was to be undertaken by only British interest or countries offering mutual opportunities for British interest, as the Oil Rights (Alien Control) Ordinance, 1942 stated:

> "An oil mining lease shall not be granted to or held by any person who is or becomes controlled directly or indirectly by a national of or by a company incorporated in any country the laws and customs of which do not permit British subjects or companies ... to acquire, hold and operate oil rights on conditions which in the opinion of the Secretary of State are reasonably comparable with the conditions upon which such rights are granted to nationals of that country."

It meant that the Crown had legislated a most favoured nations clause into the petroleum regulations and effectively stopped any other non-mutually beneficial country from partaking of the wealth of the island. It demanded reciprocity.

British control was desired and it was achieved. The companies involved in oil operations were British and included Trinidad Oilfield Ltd., a public company formed by British interest in 1913 with an authorised capital of £300,000; British Controlled Oilfields Ltd., which had the backing of the powerful S. Pearson and Sons Ltd., British oil powers in Mexico; United British Oil Company and

Trinidad Northern Areas, a syndicate of U.B.O.C., Trinidad Leaseholds Ltd. and the D'Arcy group, a British Iranian interest. It also explains why T.O.F.O. Ltd., a company with strong American interest which had sound financial backing and technical know-how, could not obtain government leases and as a result had to confine its activities to interest obtained through private oil rights.

In keeping with British colonial policy, the local petroleum and refinery operations were operated as an export industry to cater to the British Admiralty. According to the Oil Mining and Refining Ordinance, 191[illegible], refined oil would have to be processed so as to attain a standard of refinement which was suitable for use by the British Admiralty. The Oil Mining Regulations, its preamble, went even further. In its preamble, it defined "oil fuel" primarily in terms of the Admiralty standard when it stated:

> "that products of the crude oil ... complies with the following Admiralty specifications as regards flash point, fluidity of low temperature, percentage of sulphur, presence of waste, acidity and freedom from impurities."

This anxiety with fuel supplies for the Navy and the insistence on British control was in keeping with the change made around 1908-09 in operating the Navy fleet on oil rather than on other fuels and in having secure supplies for this purpose. It is not surprising to find that Trinidad Leaseholds Ltd. and the United British Refineries Ltd. had actually contracted with the Admiralty for supplying large quantities of oil fuel during the period of their

operation.[39] The products which would were to be supplied in the early days would have been obtained from the simple process of distillation and included gasoline, kerosene and heavy fuel. In addition, at the outbreak of World War II, the Trinidad refineries were the only ones which had commercial operations for producing 100 Octane and Aviation Spirit Fuel, two fuels often used at that time by Allied Forces.

In 1934, the British Parliament enacted the Petroleum (Production) Act which showed an intention to create a more comprehensive set of rules for the petroleum industry than that earlier done. It was largely an enabling act in wide terms allowing regulations to be made which would fill gaps and provide model clauses for leases and licences. This was done in the Petroleum (Production) Regulations, 1935.[40] Clearly, the intention was to cater for a large scale, efficient and systematic oil exploration programme which was necessary for securing supplies of fuel.[41] Given that the subsurface rights to petroleum were vested in the Crown, it meant that it was no longer necessary for agreement with private landwoners to be reached, before oil was

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39. Annual Administration Reports, Ministry of Petroleum and Mines, Gov't. of Trinidad and Tobago, 1922, 1923.

40. Authorized under the Petroleum (Production) Act, 1934 24 & 25 Geo. 5, c. 36, s. 6(1), hereinafter cited as Petrol. (Prod.) Act, 1934.

41. No distinction was made between natural gas and oil since ... petroleum was defined as "any mineral oil or shale. See Petrol. (Prod.) Act, 1934.

exploited. Development, as regulated by the Act and Regulations, was now a matter for state concern and not private interest development.

The 1934 Act had very far-reaching consequences in laying the cornerstone for the implementation of British policies in their overseas territories. As in Britain, the essence of the policy lay in the vesting of all petroleum interest in the Crown. This was part of the general colonial mining policy at that time. The Colonial Government outlined five main reasons for this action, namely:

> "(1) The development of minerals in colonial conditions frequently require considerable government expenditure, e.g. survey, transport and other facilities and it is undesirable that such expenditure should accrue to private mineral owners.
>
> (2) A multiplicity of owners is frequently an obstacle to the organisation of economic units of operation.
>
> (3) The payments made under contract between owners and mining companies do not necessarily accrue to the benefit of members of the community which have the most substantial interest in the land affected.
>
> (4) Minerals are important economic assets to a territory and being the gift of nature, their benefits should be shared by the community generally, to whom they belong and not be enjoyed merely by limited groups of private individuals who are not members of the community concerned.
>
> (5) Government by possession of the rights is in a position to control the size of concessions and the rate and terms of exploitation."[42]

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42. Colonial Office, Memorandum on Colonial Mining Policy, Colonial No. 206, H.M.S.O., 1946, p. 4.

With such an approach it was clear that the British Government intended to establish itself as a regulatory body by creating a framework for overseering petroleum operations while private enterprise would serve to finance and develop the resources of the colonies. In order to effectuate this policy, model regulations, licenses and leases along the lines of the British Petroleum (Prod.) Regulation, 1934 were provided. They were usually introduced "if the circumstances demand it and if there is any possibility of a search for oil being made therein".[43] Not surprisingly, there was a proliferation of legislation based on the British model in colonial overseas territories, which established a legal framework for petroleum development.[44]

In conclusion it may be said that the idea of Crown ownership of petroleum resources may have had motivation in reasons other than mere regulation. The experience of the

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43. See Circular Dispatch, 24 Nov., 1938 from Secretary of State for the Colonies and Report on the Desirability of Vesting in the Crown the Minerals Rights in Petroleum and the Policy to be adopted thereafter for Oil Prospecting and Development in Barbados by G.W. LEPPER. Supp. to Official Gazette, 31 Oct. 1949, laid before Assembly on 14 April, 1949.

44. See Trinidad, Land Oil Mining Regulation 1934; British Honduras, Petroleum (Production) Ordinance No. 17, 1937 and Oil Mining Regulation 1949; Jamaica, Petroleum Law, 1940 supplemented by regulations in 1950, 1952, 1954 and 1955; Barbados, Petroleum Act, 1950; Bahamas, Petroleum Act, 1945; Tanganyika, Mining (Mineral Oil) Ordinance 1958; Uganda, Mining Ordinance, 1949; New Zealand, Petroleum Act, 1937; Kenya, Oil Production Ordinance 1924 and amendments; Nigeria, Mineral Oil Ordinance 1914 and amendments.

First World War together with an increasing international dependence on oil as a source of fuel made it clear that abundant and strategically dispersed supplies of fuel would be imperative. In the 1930's, the sources of supply would have been from British interest in Iran, Iraq, Kuwait and Venezuela, from colonial territories or the United States which would have required dollar purchases. By 1947, Trinidad with 0.68% of total world output was the largest producer in the Commonwealth while the U.K., Canada, India, Pakistan and British Borneo also had commercial output. However, outside of this group the dominant supplies were dispersed and included Russia, Romania, Dutch East Indies and America. It is reasonable to conclude that Britain, when it looked to its colonial interest, was seeking to develop supplies from areas which were considered strategic to British naval interest and to strengthen its position as the owner of its petroleum resources.

2. Petroleum Policy: 1956-1969

While the period of 1902-56 witnessed a time of British imperialism in Trinidad, the fourteen year span from 1956-1969 saw the pendulum swing to the other side of the Atlantic when American interest became pronounced. The purchase by the Texaco Oil Company of the facilities of the British-owned Trinidad Oil Company was the first sign. However, the advent of multinational interest in the island

was part of the government's larger policy of "industrialisation by invitation", a model proposed by the Nobel Laureate and development economist, Sir Arthur Lewis.

The idea of this model was to offer foreign companies tax holidays and duty free incentives[45] in addition to cheap labour and a favourable political climate as a means of luring their technology, markets and skills. In the petroleum industry, this approach found even more justification in the fact that the island possessed a complex geological structure and was an extensively prospected region with a limited chance of unproven reserves and drilling prospects. This, in addition to the fact that petroleum development and exploration was largely regarded as expensive and risky, were ample reasons for fashioning a programme which allows foreign investment, not local money, to underwrite such risks. Consequently, the role of the state was seen as a passive revenue collector, not as a participant, while the legislation showed numerous tax incentives which, it was hoped, would accommodate the interest of foreign firms.

The refining sector rather than the production sector proved to be the source of development in this area. Trinidad, with good port and harbour facilities, offered a strategic location off the coast of Venezuela, which was

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45. See, for example, Income Tax (In Aid of Industry) Ordinance, 1955, c. 33, No. 2 and Nitrogenous Fertilizer Industry (Development) Ordinance, 1958, No. 31.

one of the largest suppliers of oil to the U.S. It was an ideal location for the integrated facilities of an American company. It was developed as an export refinery for imported oil and was the source of heavy investment by the Texaco Oil Co. In spite of this, it was not as profitable as a tax-earner as it could have been. Intra-affiliate transfer pricing deprived the local treasury of much of its taxable profits while the system of taxation allowed a writing off of losses by the refining sector in the production or exploration sectors. This could have been corrected if a separation of activity for taxation purposes, existed. Later, the refining sector was expanded and the throughput capacity significantly augmented.

Unfortunately, there was no deliberate policy to update the existing machinery for developing the oil industry. The taxation system was inefficient, the laws were obsolete and were enacted in the early 1900's and the administration was bureaucratic and unsophisticated. Two government appointed commissions, one with the well known petroleum consultant, Walter Levy, in 1961 and the other by an Iranian oil expert, Baghair Mostofi, in 1963, made recommendations for the improvement of the existing arrangements governing the petroleum industry. Two reports were produced[46] and although the recommendations were different,

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46. The Oil Economy, Govt. of Trinidad and Tobago 1961 and Report of the Commission of Enquiry into the Oil Industry of Trinidad and Tobago 1963-64, published by (contd.)

there was general agreement that the administrative, fiscal and legal policies needed reshaping so as to allow for a more optimum development in the interest of the country. There was an endorsement of the general view that this increased development was to be achieved through foreign capital and an incentive scheme which attracted these companies.

Changes were not to take place until the Petroleum Act, 1969 and its regulations in the Petroleum Regulations, 1970. These two enactments together with the Petroleum Taxes Act, 1974 and its amendment in 1981 provide the backbone of the country's legislative directives. It is now proposed to look at the policy in the period from 1969 to 1982 which is the most critical in examining the contemporary industry.

3. Petroleum Policy: 1969-1982

Before going into a discussion on the actual policies of the government, one has first to understand the structure of the local industry and its relationship to that of the U.S. with which it is inextricably bound. In Trinidad, the economy is dominated by the petroleum sector which is its largest revenue earner and export product.

André Deutsch Ltd. for the Govt. of Trinidad and Tobago, London, 1964, hereinafter cited as Report of Commission of Enquiry.

The U.S. provides a dominant market for petroleum and its products while American companies are in the majority and control the major share of the local refining and production industries. Inevitably, U.S. industry practices and standards influence local industry practices. One finds, for example, that the local fiscal laws are aimed at satisfying the requirements for affording U.S. companies the opportunity to benefit from their tax credits and incentives schemes. Also, the heavy output of residual fuel oil from local refineries is aimed at capturing east coast U.S. markets for this product. Hence, U.S. internal policies, positive or negative, have an extraterritorial effect in Trinidad for the local petroleum industry is entirely externally propelled. Given such a situation, one is not surprised to find that foreign investment policy and law is very much to the benefit of the multinational investor.

In examining the actual petroleum policies of the government, one is stalled by the lack of any expressly formulated single codified document which is presented as a statement of policy. Consequently, one is drawn to formulate the government's attitude from a series of sources including, budget speeches, legislation, white papers, seminars, commission reports and parliamentary speeches.[47]

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47. The following documents are particularly instructive in this task:
(1) Act 46 1969, Petroleum Act, 1969 (Trinidad and Tobago), hereinafter cited as Petrol. Act, 1969, (contd.)

In the period from 1969-1982, one can suggest the following main ingredients as part of the national energy policy:

(i) An updating of legislation in providing a legal framework for the petroleum industry which is more in line with international practice.

(ii) Augmenting the earning capacity of the State through the taxation of oil companies.

(iii) Incentives to attract foreign investment but on terms which cater to broader government participation and ownership.

(iv) An economic diversification of the industry based on the mammoth gas reserves and its spinoff industries as a feedstock and energy source.

(v) A policy of conservation of the natural resources of the land.

In the area of legislation, the Petroleum Act, 1969 and its Regulations were supposed to provide the panacea needed for updating and reshaping the direction of

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and Petroleum Regulation, 1970, hereinafter cited as Petrol. Reg., 1970.

(2) Announced Energy Policies of Government of Trinidad and Tobago, 1979.

(3) A Statement on the Implementation of Government Petroleum Policies, 1969.

(4) Budget Speeches 1974 and 1975-81.

(5) White Paper on Public Participation in Industrial and Commercial Activities, No. 1 and 2, Govt. of Trinidad and Tobago, 1972.

(6) Conference Report on Best Uses of Our Petroleum Resources, Vol. 1, Govt. of Trinidad and Tobago, 13-15 Jan. 1975, hereinafter cited as Best Uses of Our Petroleum Resources.

(7) Speeches in by the Minister of Energy and Energy Based Industry on 15 Oct. 1976; 13 Oct. 1978; 22 April 1981. Mimeo, Min. of Energy.

the petroleum laws of the country. Its purpose was to establish a general framework within which the government would negotiate the obligations and duties of invited companies. The Government, by its own admission, stated that the previous laws were "antiquated, ineffectual and sometimes obsolete in respect of technical and fiscal matters" and as a body of laws was "incoherent and suffers from a lack of continuity". The new Act and Regulations were

> "to secure the more effective participation by Government in the affairs of the industry, and will receive better conservation of the country's most important natural resources."[48]

The Act and Regulations served to establish a major portion of the petroleum policy for it was a comprehensive document which detailed the rights, obligations, duties, responsibilities and practices of the industry as a whole. Its deficiency, however, lay in its lack of regulation for the natural gas industry.

The year 1970 was a watershed year in the history of the country. An inflamed and disenchanted population spurred the worst social upheavals ever recorded in the island. This prompted a government document, White Paper on Public Participation in Industrial and Commercial Activities, 1972, which promised greater public participation in the economic running of the country. Foreign

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48. Hansard, 12 Parl. Deb. Trinidad and Tobago (House of Rep.), 1969-70, para. 1088.

investment was acknowledged as necesary to bring in "expertise, new technology and export markets to assist and supplement national efforts in our development." However, "national participation from the very outset" was necessary in addition to an "orderly transfer of technology" as a means of attaining "economic independence and substantial local control of its economic affairs" which would allow the state to take control of the "commanding heights" of the economy including oil and petrochemicals.[49] The state, in short, wanted greater participation in the development of its resources.

As time progressed and the need for greater foreign exchange became apparent, the revenue policies were remodelled in order to underwrite the national development programmes. The Yom Kippur War and the resultant quadrupling of O.P.E.C. prices offered an unexpected windfall to the local treasury. This price inflation was part of the reason for the Petroleum Taxes Act, 1974 which ostensibly was "to bring practices and prices for tax purposes in line with current international trends and give the country the decisive voice in the important question of oil prices."[50] Also, the refining sector was to be taxed separately from the production and marketing sectors because of the "need

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49. See Third Five-Year Development Plan, Govt. of Trinidad and Tobago, 1969-73, pp. 54- 56.

50. Budget Speech, Govt. of Trinidad and Tobago, 1974, p. 52.

to assure a reasonable flow of revenue from the refining function." The new tax reference price together with increases in the rate of taxation proved very profitable from the national point of view. However, company pressure and a declining oil production saw an introduction of the "realised price" scheme and more incentives for foreign investment in the Petroleum Taxes (Amendment) Act, 1981.

But perhaps the main thrust of the state's policy was in its diversification programme. It was proposed to undertake a large scale industrial diversification programme based on the production of iron and steel, methanol, urea, liquified natural gas and an aluminium plant from the country's extensive gas reserves. Oil production and refining were to continue to provide finances for the country's gas based industries in the only energy development programme in the Caribbean. Gas was to be the "trigger in the establishment of new manufacturing industries."[51] In conjunction with this policy, a conservation programme was recommended which regulated the flaring of gas by companies and advocated proper petroleum practices and optimum depletion rates.[52]

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51. See, Best Uses of Our Petroleum Resources, op. cit., supra, note 47(6).

52. See Minister of Energy and Energy Based Industries, Speech in House of Representatives, 13 Oct. 1978. Mimeo Min. of Energy. Also see for an earlier position, D.R. CRAIG, "Oil and Gas Conservation in Trinidad and Tobago", Govt. Printery, Nov. 1960.

In conclusion, one can see that the Government policy involves a role as a greater revenue earner in order to fund the undertaking of its diversification programmes in using gas as a feedstock and fuel. Inevitably, a better conservation of the resources is necessary. Backward and forward linkage of the industry with the rest of the economy is sought, and it is seen as an attempt to reduce dependence on one product. Some legal restructuring has taken place with the new Acts and this shows some attempt to make the laws contemporary and relevant in order to achieve the wider objectives of the state.

However, one should caution that there is a basic difference between practice and plan. The formulation of well meaning objectives does not mean their inevitable fulfillment, especially in a country which has had a history of broken promises.

4. Administration of the Petroleum Industry Before 1956

Introduction and Overview

In order to fully understand the administrative structure of the petroleum industry, it is necessary to trace the evolution of the framework within which the laws were given expression. The laws which created the organic structure for operation were only repealed in 1969 by the Petroleum Act and so served to create the basic

organisational infrastructure upon which was imposed that of the civil service and ministerial hierarchy in 1956. In 1956, there was the granting of internal self-government and ministries and portfolios were created.

The period before 1956 was really the time when most of the island's petroleum laws were enacted and which remained in force, with some exception, until 1969. It was only in 1962 that a Ministry of Petroleum and Mines was established with separate responsibility for oil and gas matters while a Ministry of Finance was created earlier in 1956. Before this period, the entire administration was concentrated in the hands of the Governor who was the chief executive functioning as representative of the monarch. Since it was not possible for him to carry out all duties they were delegated to a network of departments, department heads together with civil servants employed as assistants.

The administrative structure which resulted from the law at that time was evident in the Petroleum Department and Conservation Board Ordinance, 1938, Mines, Borings and Quarries Ordinance, 1907, Land (Oil Mining) Regulation, 1934, Oil and Water Board Ordinance, 1921 and the Pipeline Ordinance,, 1933. From 1904, when a Mines Department was established as a branch of the Public Works Department, to 1938 when a Petroleum Department and Conservation Board was created, there were little formalised organisations for administering petroleum policy. The Mines Department, an

arm of the civil service had a northern branch headed by an Inspector of Mines and a southern office served by the Petroleum Technologist. The Inspector of Mines was the head of the department and acted as representative of the Governor in the general regulation of petroleum matters.

In 1902, when all petroleum rights were granted to the Crown, the Governor or his representative as the Intendent of Crown lands had the right to issue licenses or leases for its development. As the Crown Lands Ordinance, 1918, s. 29 recognised,

> "All licenses authorising the digging, mining or removing of material from Crown lands shall be in such form and issued by such person as the Governor may from time to time prescribe."

In practice, the Crown Lands Department was the responsibility of the Sub-Intendent of Crown lands who managed lands on behalf of the Crown.[53] One is able to identify two distinct departments, the one under the Sub-Intendent and the Mines Department under the Inspector of Mines, who were both delegated responsibilities entrusted to the Governor. The Sub-Intendent is clearly recognised as an administrative functionary in that all applications for exploration licenses are made to him although it was the Governor who granted it and contracted on behalf of the

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53. See Crown Lands Ordinance, 1918, ss. 5 and 6(1).

state as lesssor.[54] Similarly, the Petroleum Technologist receives applications for carrying on the business of refining which the Governor has the right to approve.[55] Such was the departmental structure and since all functionaries were expatriates it was clear that they would act solely in the interest of the colonial government.

Given such an overall structure, it is now proposed to look at three separate statutorily created bodies, the Petroleum Department, the Petroleum Conservation Board and the Oil and Water Board, to understand the reasons for their creation and their utility in the overall administrative structure.

(a) Petroleum Department and Petroleum Conservation Board

The Petroleum Department and Conservation Board Ordinance contemplated the establishment of two bodies, the Petroleum Department and the Petroleum Conservation Board. The Petroleum Department was established for maintaining better conservation of the oil resoures of the colony and was the guardian of the obligations owed to the Government by oil operators. Its staff which was appointed by the

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54. See Land (Oil Mining) Regulation, 1934, s. 6 and Sch. 1, Forms A and B.

55. See Oil Refining Regulation, Regs. 3, 4, 5, 6.

Governor had to see that all obligations and duties on licensees and leases created by the laws in force were abided by. For this purpose, operators were obliged to make a refundable ten thousand dollar security deposit which would only be reimbursed if the Petroleum Technologist issued certification verifying that all obligations were complied with under the law.[56] Hence the Department acted as trustees of the money and as watchdogs on behalf of the state. The Department itself was responsible for its own financial solvency as derived from "operating fees", "oil import fee" together with sums forfeited from the operator security deposit which served to defray salaries, pensions and the administrative cost of the Department.[57]

The second body created under the Ordinance was the Petroleum Conservation Board consisting of the Petroleum Technologist and five persons engaged or connected with the oil industry as appointed by the Governor.[58] Their purpose was to advise the Governor on questions of conservation of oil resources and the development of the oil indsutry. It

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56. Petroleum Department and Conservation Board Ordinance, 1938, s.6(1).

57. Id.,. ss. 4, 10, 11(6).

58. Id., s. 12(1).

was purely advisory and consultative and had no administrative function.[59]

What can be understood from this Ordinance is that a policy-oriented advisory body and an implementing administrative body were created to deal with the question of conservation and development in the oil industry. The Petroleum Technologist, who sat on both bodies, was the legal link between the development of policy and its implementation. The Governor was the overall administrator of both units.

(b) Oil and Water Board[60]

This was a quasi-judicial body established to, inter alia, regulate matters relating to the pollution of land or water which resulted from oil mining operations. Its power was to hear and adjudicate on

> "(a) all complaints as to pollution of land by oil mining operations;
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> (b) all application for licenses to commence or carry on oil mining operations causing or likely to cause pollution to land; and

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59. Id., ss. 13(1), 13(2).

60. This Board is still legally in operation for no regulation has been made to supersede this Ordinance as required by the Act. See Petrol. Act, 1969, ss. 19, 38.

(c) all applications for license to abstract water from any watercourse for the purpose of any industry."[61]

This Board itself was constituted by a judge of the Supreme Court, the Director of Works and of Agriculture, the Petroleum Technologist and four "unofficial members" appointed by the Governor of which two were from the oil industry and two from the agricultural sector. Hence, both public and private enterprise was represented.

In exercising its powers the Board has quite broad scope. Its jurisdiction can be invoked by a complaint made by a person occupying land, in which he has an estate or interest, and which has been or is likely to be injuriously affected by pollution.[62] The Board has powers to investigate such complaint, before deciding on a remedy. As a

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61. Oil and Water Board Ordinance, 1921, ss. 3(1) (a), (b), (c).

62. In defining pollution the Ordinance contemplates a "deemed pollution". This occurs when, as a result of oil mining operations, land is polluted by "the escape of oil or salt water or any solid or liquid matter, whether of a nature similar to oil or water or not, from any mineral oil well or from any boring or excavation for the purpose of finding or winning mineral oil or from any natural or artificial pond, reservoir, swamp, tank, watercourse, channel or pipe used in connection with oil mining operations or if it is polluted by the bursting, flooding or overflow (not being due to the negligence of the owner of the land polluted) of any pond, reservoir, swamp, channel or watercourse which has been polluted as a result of oil mining operations." See Oil and Water Board Ordinance, 1921, see s. 11.

remedy, there are two options available. If there is a justified complaint, the Board can assess and order the payment of compensation or, alternatively, decide on whether commencement or continuation of operations is in the public interest and if so, the conditions which should be imposed in its undertaking. It cannot usurp the powers of the Supreme Court in prohibiting operations where an injunction is the appropriate remedy.[63] In imposing new conditions for the commencement or continuation of operations, it is in fact compelling existing operators to enter into fresh contractual obligations for controlling pollution because the Board has power to "revise, alter or revoke" an oil license for this purpose.[64] The Board's power then, exceeds mere investigative duties since in providing remedies it can be directive and regulatory as well.

In its capacity as a quasi-judicial body there would be justiciable issues which involve points of law, and these are to be decided by the chairman, who is a judge of the Supreme Court. He also sits with three other members to decide non-legal issues. Decisions are "final and

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63. (Id., ss., 13(1), (2), (3))

64. Id., ss., 18(1), (2), (3). So as not to create a deferrent to investors a public inquiry, at which all interested parties are heard, is held when new obligations are to be created. See Oil and Water Board Ordinance, 1921, s. 16.

binding"[65] on all parties served with notice, attending or represented, though appeals are allowed to a sitting of the full court without the chairman.[66] The legal attributes of the Board as evidenced in its decision-making powers, to sue, to award and tax cost and to summon witnesses[67] all recognise its quasi-judicial nature. However, its decisions are only extensions of administrative policy in that it protects and enforces the licensing and pollution policies of the Government. Clearly, it was created to provide a regulatory framework for the administration of oil pollution, as a court of complain in the first instance and as a licensing authority.

(c) Petroleum Inspector and Manager of Borings

In keeping with the policy of appointing administrative personnel on whom the burden of delegated responsibility rested, two positions were created in the Mines,

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65. This should be interpreted as subject to judicial review of administrative action, see Re Gilmore Application, [1957] 1 All E.R. 796.

66. Oil and Water Board Ordinance, 1921, s. 7(1).

67. Id., s. 9 states that "for the purpose of performing its duties under this Ordinance, the Board shall have all the power of the Supreme Court of summoning, enforcing the attendance of and examining witnesses on oath and of ordering and enforcing the attendance of and examining witnesses on oath and of ordering and enforcing the production of documents."

Boring and Quarries Ordinance, 1907. These were the Petroleum Inspector, a government employee, and the Manager of Borings, an oil operator appointee, both of whom were intended to improve the daily supervision of oil mining operations and safety on the site by creating reporting obligations on the operators and giving a right to inspect to the Inspector.

The Inspector is given the responsibilities to:

> "(b) enter, inspect and examine any boring and every part thereof, at all reasonable times of day or night;
>
> (c) to examine and make enquiry respecting the state and condition of any boring ... and all matters and things connected with or relating to the safety of the persons employed;
>
> (d) to exercise such other powers as necessary;
>
> (e) to delegate any of the powers to assistants."[68]

His powers are concerned with inspection of drillings so as to verify their safety and good working order. The other position created is that of Manager of Borings who is appointed by the owner or his agent, either of whom can

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68. Mines, Boring and Quarries Ordinance, 1907, s. 22. In the preamble to this Ordinance a "boring" is defined as including "every bore hole in the course of being made, and all borings from which petroleum oil, brine, water or other mineral substances are extracted, and all works, tramways and slidings connected with, adjacent to and belonging to the boring".

also act in the position. In any event the appointment has to be approved of and certified by a special board comprising the Inspector and two other appointees of the Governor. The appointed person then has to satisfy the information and reporting requirements established by law which include, inter alia,

1. Keeping a proper plan showing the location and working of the boring which is to be made available for inspection.[69]

2. Planning details of abandoned mines.[70]

3. Sending to the Inspector annual reports showing amount of crude and other petrol obtained and sold for local consumption, amount of persons employed, length of pipelines, capacity of storage tanks and any other information the Inspector requires.[71]

4. Giving of notice and details to the Inspector of any explosions and accident which results in loss of life, personal injury, fractures or serious personal injuries of employees.

5. Giving notice to the Inspector of commencement, abandonment, discontinuance or recommencement of work on any boring.

It would seem that the obligation is only to keep and have the necessary information in (1) and (2) and not to forward it to any office or body as required in (3), while (4) and

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69. Id., ss. 16(2), (3).

70. Id., s. 17.

71. Id., s. 18.

and (5) only oblige the operator to give notice. This can only mean that a person involved in mining operations is only obliged to inform the Department of Mines of its activities while the onus of auditing, inspecting and monitoring is left to the Department itself. The Manager of Borings is responsible for the daily running of operations in accordance with their contracts and the law while the Inspector acts on behalf of the lessor in seeking compliance with these obligations. The obligations imposed by the Ordinance must be complied with under penalty of conviction and a fine.[72]

(d) Pipeline Regulation[73]

Because of the importance of pipelines as a means of transport for petroleum and due to the fact that it usually passes over land which is private property, there was passed in 1933, the Pipeline Ordinance which is intended to regulate the laying of pipelines used or intended for use in the production or refining of mineral oil or natural gas. A license had to be obtained in order to lay or connect any pipeline on property vested in the

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72. Id., ss. 22 and 29.

73. The Pipeline Ordinance, 1933 remains in existence until it is superseded by new regulations as required under Petrol Act, 1969, ss. 29, 38.

Crown. The power to issue a license vested with different people depending on where it was to be laid. In the case of a road or waterway the Director of Works and Hydraulic was responsible; for Crown lands, the Sub-Intendent of Crown lands, and for railroads the issuing body was the General Manager of Railways. Consent to such a license was not to be "unreasonably withheld" for a statutory right of review would lie with the Governor in such case.[74]

In the case of an application for permission to lay a pipeline on land not belonging to the Crown, the Ordinance requests that the applicant apply to the landowners for a deed or instrument of assent which if given, constitutes a registerable document under the Real Property Ordinance as an encumbrance on the land.[75] It is also recognised that compensation is to be paid to the landowner, for the rights given, in order for the assent to be binding.

Pipeline administration was in the hands of the Crown only if the lands involved were Crown lands, in which case designated officers could license its laying. However, private rights and the right to compensation were

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74. Pipeline Ordinance, 1933, s. 4(2) and also, it is suggested under the common law the duty to act reasonably is assessed by an objective test, see Wakkud Ali v. Jaya, [1951] A.C. 66 and Cedeno v. O'Brien (1964) 7 W.I.R. 192.

75. Pipeline Ordinance, 1933, s. 8(5).

recognised in the Ordinance and these lay outside the jurisdiction of the Crown's administration.

(e) Summary and Conclusion: Administrative Trends After 1956

From the Ordinances reviewed one can see that the Government, in the colonial era, created a very monolistic structure dominated by the unlimited powers of the Governor and the Petroleum Technologist. It catered not to local rule but to overseas administration and policy and lacked a diversity which is imperative in petroleum administration. In 1956, when a Chief Minister, later Premier, was appointed with powers to allocate ministries and portfolios the power of the Governor became conditional on his "advice" and one could detect an embryonic cabinet in the making.

In 1956, the island received its first Minister of Finance which replaced the office of Financial Secretary and there was created a Petroleum and Mines Ministry in the Second Five- Year Development Plan, 1964-68. This era also ushered in the civil service structure which made ministers the department heads, who were then accountable to a Prime Minister in Cabinet and Parliament as decreed in the Independence Constitution 1962.

In the petroleum administration, prior to 1963, there was a distribution of responsibilities to different ministries with the Minister of Agriculture and Lands

responsible for licenses and leases, Minister of Labour for safety of plants and working conditions in the oil industry, while the Minister of Finance handled taxation, foreign exchange and the import-export sectors. In these duties, the Minister of Finance was assisted by the Commission of Inland Revenue, Comptroller of Customs and Central Bank, established in 1964. The creation of a Ministry of Petroleum and Mines was intended "to place in the hands of a single minister all responsibilities for government control in the oil industry".[76] The Government at this time appointed a commission to look into matters relating to the oil industry and to make recommendations and here one finds, as a policy matter, a desire "to assume better co-ordination between more efficient control over the various branches of the petroleum industry".[77] One of its main suggestions was the creation of a Central Petroleum Administration within the Ministry of Petroleum and Mines "to concentrate all government actions of concern to the petroleum industry" and a Special Ministerial Petroleum Committee "to guarantee co-ordination of government policy-making and action". This report, together with an earlier study,[78] formed the basis of the recommended administrative

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76. Report of Commission of Enquiry, loc. cit., supra, note 46, p. 53.

77. Ibid.

78. An organisational study undertaken by the firm Peat, Marwick and Mitchell, organisational study of Ministry of Pëtroleum and Mines, Aug., 1968.

structure. However, only some of the recommendations of the earlier study were used and significant reform along the lines of the report have not taken place.

Except for changes made over the last five years in the administrative structure, petroleum administration after 1956 survived on the inherited infrastructure and its laws. Except for the formation of a Ministry of Petroleum and Mines (later Energy and Energy Based Industries) in 1963, there was a monolithic structure, which was not diversified and was lacking in discretion. There is a certain amount of political logic in such a centralized structure but, as would be shown later, it does not cater to efficient management and optimum growth in the industry as a whole.

5. Legal Regulation of the Petroleum Industry: Pre-1969

(a) Basis of Legal Rights

A discussion on the legal regulation of petroleum would not be complete without a brief interlude on the nature and concept of the right itself and the manner in which it can be possessed. Oil, as a substance, has a fugacious nature which renders its capture an imperative condition for obtaining its title.[79] A distinction can be

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79. See Borough of Bradford v. Pickles (1895) A.C. 587; Trinidad Asphalt Co. v. Ambard (1899) A.C. 594; U. Po Waing v. Burma Oil Co. Ltd., 16 I.A. 140.

made between the ownership of a right to recover oil and ownership of the oil itself or ownership in situ. This distinction necessitates a further classification between whether the right is a corporeal or incorporeal hereditament. In commercial language one encounters even further uncertainty in deciding whether there is such a thing as a lease of oil rights or a profit à prendre for uncertain terms or merely a contract for the sale of property. If it is a lease which is perpetually renewable, as some oil contracts are, then it may be void for uncertainty. One can also take the view that it is not possible to have a contract of sale for a substance which has not yet been reduced to possession. Hence, the decision as to the exact nature of an oil contract could be rendered an arduous task.

Perhaps the most satisfactory explanation is that a lessee obtains an incorporeal hereditament in the form of a profit à prendre which allows a right to "win" and "take" oil and gas and a proprietary interest in the substance only arises on capture. This certainly would appear to be the law in Trinidad, where a right to "win" without obtaining title to the substance "in strata" is given.[80] Such a title finds classification in the theory of "qualified

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80. See Petroleum Reg., 1970, s. 32. Also Model Production Sharing Contract hereinafter cited as Model P.S.C., s. 2(1) which gives a right "to search for, drill and get petroleum ... but does not confer any ownership rights to the petroleum in strata or any other rights in land ...".

ownership" as used in Canada, England and the United States, in the states of Pennsylvania and California, which recognise oil leases as giving an incorporeal right to explore and to have title only on reduction to possession.[81] However, in spite of the conceptualism associated with the various theories of ownership and the attempt to fit oil and gas rights into existing theories of property law, the important issue is really to define the rights and obligations enounced in the contract and to evince the proper intention of the parties in so doing.

(b) Nature of Rights: Petroleum Regulation Before 1969

Petroleum bearing lands in Trinidad are regulated by either private or public land law rights. In the period before the Real Property Ordinance, 1889, land was held by both the Government and private landowners, who held rights granted by the previous Spanish and British governments. These included the right to minerals since they were grants of surface and subsurface rights. The Real Property

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81. This can be compared to the position in Texas where an interest is tantamount to a fee simple interest or a "defeasible fee" as used there. See Texas Co. v. Dougherty (1915) 107 Tex. 226 and Texas Co. v. Davis (1923) 113 Tex. 321. This may be called the "absolute ownership" theory. Another concept exists in Oklahoma and Indiana where oil leases are only considered as giving an exclusive right to explore. See Frank Oil Co. v. Belleview Gas and Oil Co. (1911) 29 Okla. 719.

Ordinance, 1889, saw a reservation by the Crown of all mineral rights thus depriving subsequent purchasers from acquiring subsurface rights to these substances. In 1902, petroleum rights were expressly reserved thereby bringing to an end the concept of private oil rights except those which existed before this period and which continued to exist.[82] In this sense then, one could establish a classification for the status of land and the rights associated with each type of holding. The three types of land were:

1. Crown Lands (now State Lands) in which the surface and subsurface rights are owned by the state.

2. Private Lands, the surface and subsurface rights are held by private landowners, having been so vested before 1902 by the British and previous Spanish Governments.

3. "Alienated Land" which were alienated since 1902 by the Crown and where there is a horizontal stratification of rights with the surface interest belonging to private owners and the subsurface interest to the government.

The state, is responsible and has a right to the oil and gas development of the Crown Lands, now State Lands, and the Alienated Lands, while private lands are essentially a matter for individual landowners.

In the submarine area, the state has exclusive jurisdiction and derives its authority from treaty law and general principles of law as recognised by civilized

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82. These rights, "Oil Land Titles", were governed by the Conveyancing and Law of Property Ordinance, 1950, No. 12, c. 27, Revised Laws of Trinidad.

nations and as re-enacted by the local parliament. Under the Gulf of Paria Treaty of 1942 between Venezuela and the United Kingdom, which administered Trinidad as its colony, the subsoil and sea-bed of the area between Trinidad and Venezuela was divided on the basis of the medium line principle.[83] It established boundaries on the southern and western coast of Trinidad. In addition to this treaty, the continental shelf and territorial waters jurisdiction of the country, are recognised under international law. These claims are re-enacted locally in laws which seek a twelve nautical mile territorial water[84] and a continental shelf to a depth of two hundred meters.[85] It is in these areas where most of the submarine oil and gas activity have been concentrated and where the natural resources are vested in

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83. See Submarine Area of the Gulf of Paria (Annexation) Order, Order-in-Council, 1942 though it is questionable whether this principle or that of the continental shelf was firmly established at that time. See Petroleum Development Ltd. v. Sheikh of Abu Dhabi (1951) I.L.R. 1951, p. 144.

84. Act 39 1969, Territorial Sea Act, 1969, Trinidad and Tobago), ss. 3-7.

85. Act 43 1969, Continental Shelf Act, 1969 (Trinidad and Tobago), hereinafter cited as Continental Shelf Act, 1969. See Continental Shelf Act, 1969, s. 2 which defines the continental shelf to mean "the seabed and subsoil of the areas adjacent to the coasts of the island of Trinidad and the island of Tobago and all other islands within Trinidad and Tobago but outside the area of the territorial sea to a depth of two hundred meters and beyond that limit to where the depth of the superjacent waters admits of exploitation of the natural resources of the said areas."

the state.[86] Therefore, the position from 1902 to the present time shows the state as the owner of mineral rights in both land and submarine areas, with the exception of very few privately owned acreages.[87] The various types of oil rights over land and marine areas can be broken down as follows:

1. State Lands where the state owns both surface and subsurface rights.

2. Alienated Lands where, as from January 1st, 1902, the government owns mineral rights in the subsurface while surface rights are held by private persons.

3. Submarine areas where mineral rights are owned exclusively by the state.

4. Privately owned lands where the mineral rights are owned exclusively by the state.

5. Privately owned lands where the mineral and/ or petroleum rights are held by its owner.

As explained earlier, the attitude of the colonial government was to encourage private enterprise to develop the resources of the island. This was done by the granting of a deed, which is registerable as a public document while private oil rights were contractually granted. In examining the nature of the rights, there are two periods of importance, one being the period before 1934 and the other after, when the Land (Oil Mining) Regulations were passed.

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86. Continental Shelf Act, 1969, s. 3(1) and see also s. 3(2) which states activities have to be legitimately licensed.

87. At the present time this accounts for less than 2% of totally leased acreage.

In the period up to 1934, there was a three-tiered structure for the allocation of petroleum rights. First, there was an exploration license which gave an exclusive right to explore and search for oil on specified lands and a preferential right in applying for an oil prospecting license after certain work obligations were fulfilled. An oil prospecting license could be granted to an applicant in spite of the fact that he may not have had an exploration license and it conferred an exclusive right to prospect for oil and the right to sell and export oil obtained, subject to the payment of fiscal dues. Work obligations were also specified and although the area granted was usually smaller than that of an exploration license, the time allowed for prospecting was longer. Finally, the oil lease was given but only to those in possession of a prospecting license and for the same area or together with an adjoining parcel. It was granted over a longer time and renewable thereafter. The lease allowed a right to all petroleum and its provisions were more comprehensive in that obligations of safety, employment, wages and refining, among others, were defined. This three-tiered structure allowed governmental control of operations at all stages for its approval was necessary in order to progress from one stage of operations to another. Also, licensed operators were not allowed to hold extensive areas for a very long period, for such would have effectively rendered a divesting by government of its interest.

In 1934, changes were introduced by the Land (Oil Mining) Regulation and Submarine (Oil Mining) Regulations. This saw the use of a variety of contracts. There was the exploration licence while the prospecting license was amalgamated into the mining lease and a composite mining lease was obtainable for Crown and Alienated Lands. With the introduction of submarine leasing,[88] a submarine oil mining license could have also been tendered for.

The Exploration License[89] granted to its holder a right to carry out a geophysical survey, geological and topographical examinations and surveys and the right to dig up the surface of the land to a depth of twenty feet. It lasted for a two year period and covered areas ranging from 500 acres to 100,000 acres which had rental fees attached. After this initial leasing there followed the Oil Mining Lease, which was obtainable automatically by previous holders of exploration licenses. It authorised its holder to carry out exploration work, to drill, to extract oil and gas and to be involved in industrial and commercial operations related to such operations. A period of thirty years was allowed after which it was renewable and surface

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88. See Annual Administration Report of Petroleum Department, Govt. of Trinidad and Tobago, 1937, p. 5.

89. None existed for land operations as of 31 Dec. 1963.

rentals were payable. There was no limit on the number of leases a company could hold. Finally, the Submarine (Oil Mining) License give a right to its holder to carry out such activities necessary in order to explore and extract oil and gas from authorised submarine areas and which were a minimum size of six hundred and seventy-five acres and beyond the high water mark of the sea.[90] Leases and licenses carried an application fee, annual rentals, dead rent payment, an escalating royalty and income taxation, while an incentive of a depletion allowance was offered. Under this restructured two-tiered system, an operator was given the right to search and define the economic value of an area during the initial license and then asked to make a long term investment based on these findings. It was, in the words of one report, "to encourage the most rapid development of the nation's oil economy, consistent with the availability of its resources".[91]

The position outlined above was to continue and served to regulate the nature of contractual rights until 1969 when the Petroleum Act and its Regulations of 1970 were introduced. As a body of laws for regulating the industry they were found to be "not very exacting" which "did not set performance standards for company activity"

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90. See Oil Mining (High Water Mark) Ordinance, 1952.

91. W. LEVY, The Trinidad Oil Economy, 1961, p. 29 hereinafter called "Levy Report".

and did not cater to "any requirement for relinquishment of acreage under lease."[92] Obviously, there was need for revision as outlined in two government commissioned reports, one in 1961 and another in 1963 both of which went unheeded for some eight further years.

(c) Obligations under Legislation: Pre-1969

As noted above, the laws were "not very exacting" on the investors in particular, with respect to the relinquishment and performance standards. However, there is evidence that the lease as outlined under the 1934 regulation did prescribe a standard which was to be "skillful and workmanlike ... in accordance with methods and practice customarily employed in good oilfield practice"[93] and a further obligation to avoid any obstruction or interruption to the development and working of any minerals not included in the lease.[94]

In matters of pollution, a legal distinction is made in between land and marine pollution, for there is a right to compensation only in the case of a "deemed pollution" on land.[95] Compensation is to be assessed by the Oil

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92. Ibid.

93. See Land (Oil Mining) Regulation, 1934, Form B, Cl. 6. For marine areas, see Form , Cl. 18.

94. Id., Form B, Cl. 20.

95. Oil and Water Board Ordinance, 1921, s. 11.

and Water Board. Hence a claim for compensation for pollution could have also arisen in the event of a breach of the requirement to work in a "skillful and womanlike manner". Alternatively, an action for compensation resulting from pollution could have arisen in the general law of torts under the rule in Rylands v. Fletcher.[96] The intention of the law seems to have been to protect surrounding landowners, farmers and dwellers from pollution or loss of crops or livestock and to provide a monetary compensation for such loss. In the submarine area, which involves more of a national environmental interest, the state was to take "all practical measures" to protect the coastal waters.[97] This obligation was transferred to the submarine lessee as an obligation to use modern equipment in taking "practical precautions to prevent pollution of the coastal waters.[98]

Therefore, in both land and submarine areas, the lessee was placed under an obligation to prevent pollution

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96. 1868 L.R. 3 H.L. 330.

97. In Gulf of Paria Treaty, 1942, s. 5(2) states:
"All practicable measures shall be taken to prevent the exploitation of any of the said submarine areas from causing the pollution of coastal waters by oil, mud or any other fluid or substance calculated to contaminate the sea water or shoreline."

98. Submarine Oil Mining Lease states:
"The lessee shall adopt all practical measures precautions (which shall include the provision of modern equipment) to prevent pollution of the coastal waters by oil, mud, or any other fluid or substance which might contaminate the sea water or shoreline."

and in the case of land to pay compensation for what was deemed pollution.

A right to arbitration and compensation also existed under the law. Arbitration was recognized as the settlement procedure for any dispute connected with petroleum operations and as the assessment channel in the determination of damages arising from the searching, prospecting and winning of minerals in any land which was the property of the Crown.[99] Compensation existed under the contract "for all injury or damage which may be done by the licensee ... in the exercise of the license thereby granted"[100] and included "the occupation of any land for surface operations."[101] This meant that a lessee owed an obligation to landowners for disturbances to surface rights. Implicitly, this recognised the idea of the horizontal stratification of ownership rights and concessions given for such, and also recognises a right to a quiet enjoyment of his land. Interferences with these rights meant that a claim for compensation would arise in arbitration proceedings.

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99. See Mining Compensation Ordinance, 19, s. 3(1).

100. Land (Oil Mining) Regulation, 1934, Form A Cl. 14 and Form B, Cl. 23. An absolute liability for damage resulting from fire, Oilfield Fire Control Ordinance 19 s. 10; Water, Oil Bearing Sands (Water Control) Ordinance, 1950, s. 8 and in the laying of pipelines, Pipeline Ordinance, s. 20 was also created by law.

101. Land (Oil Mining) Regulation, 1934, Pt. III, Cl. 1.

An onerous obligation which was placed on the lessee, was one to have local processing of crude by requiring the erection of a refinery. The state had an exercisable option, on oil production reaching one hundred thousand barrels per annum, to authorise the construction and operation of a refinery capable of refining fifty percent of that production.[102] This was an interesting obligation in the light of the very small demand for refined crude and its products by the local economy. It obviously accentuated the export nature of the refining business and the need to accommodate crude oil from British integrated companies operating in nearby Venezuela and to fulfill the policy, at that time, of having refineries near to supply areas and on transportation routes. It also provided foreign exchange to the local economy through the export of refined products.

(d) Conclusion

In the pre-1969 period, the legal regulation of the local petroleum industry was dominated by outdated colonial law. These laws were not suited to an independent state which wanted to assume more of a managerial role over its natural resources but were relics of an era when these

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102. See Oil Mining and Refining Ordinance, s. 8(1) and Land (Oil Mining) Regulation, 1934, Form B. Cl. 17 and Form D, Cl. 17.

resources were developed according to the policies of a colonial government. In the period after 1969, the laws were changed to cater to greater participation and management by the state and placed stiffer obligations on investors. However, it is questionable whether these changes allowed the achievement of these objectives. Also, the theoretical framework often lacked the operational implementation necessary for the achievement of a meaningful role for the state. It is clear that change was always late in coming and lacked the dynamism necessary for rearranging the fundamental underpinnings of the industry's structure according to any national plan.

CHAPTER TWO: INSTITUTIONAL FRAMEWORK OF THE PETROLEUM INDUSTRY

A. ADMINISTRATIVE REGULATION OF THE OIL AND GAS INDUSTRY

Introduction

In examining the institutional framework which administers the oil and gas industry one has to bear in mind that it is based on the underlying concept of the "mixed economy" theory. In this model there is a co-existence between state and private investment which are "mixed" together. Institutions are structured to allow for the expression of this concept while also serving to regulate, co-ordinate and plan activities in accordance with broader governmental objectives for national development.

In a mixed economy, there is quite a variety of bodies. There are ministries such as the Ministry of Energy, Ministry of Finance and Ministry of State Enterprises which are the main government departments. A holding company has been established in the National Energy Corporation, which directs the policies of other sectoral corporations, in particular areas of the energy industry such as the national oil company, national gas company and the marketing corporations. These are state run companies. In addition, the joint-venture interest of Trinidad-Tesoro Petroleum Company Ltd., which is a union between the state and a private foreign investor, exists alongside. The existence of state administrative regulatory agencies and

commercial bodies operating in juxtaposition with foreign investment interest characterises the economy which has both a private sector and nationalised industry.

A new trend in administrative and policy making supervision is now being witnessed. There is the rise of "adhocracy" or "supra-ministerial cabinet appointed bodies" which are appointed to fill the deficiencies in the present system. These appear anomalous in the present institutional arrangement, for existing bodies are being superseded without any stated and defined rearrangement. As such, administrative bodies appear to be loosely connected without a clear charter or mandate as to their functions. It seems to be a period of institutional experimentation.

Before looking at the actual institutions which exercise rights over the petroleum industry one has first to establish the legal guardians of these rights or those who possess the power to deal with these resources. The Parliament as the representative of the people vested these rights in the Head of State, who represents the state in this case. As the law declared of public petroleum rights,

> "Public Petroleum Rights are hereby vested in the Crown in right of Trinidad and Tobago and are exercisable by the Governor General."[1]

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1. Petrol. Act, 1969, Preliminary Interpretation s. 2(1)(o) defines "public petroleum rights" as rights to petroleum in its natural condition in strata (contd.)

This vesting would appear to contemplate the actual proprietary rights or ownership in the state rather than merely a right to regulate these resources. In fact, the state becomes the legal owner and custodian of this resource for the people of the country. Such ownership rights would also appear to extend to natural gas for the word petroleum is defined to include natural gas, which is said to be "petroleum in the gaseous state".[2] Ownership carries with it the additional responsibility of administration. This requires a management to achieve the national objectives of the state. The Petroleum Act, 1969 and its regulations are the regulatory statutes which direct the development of these resources and the government has been given the responsibility, under these laws, for the general administration of this Act, as it states,

> "The Minister is charged with the general administration of the Act, and in the exercise of his powers and the performance of his duties he shall conform with any general or special directions given to him by the Cabinet. Any decision made or action taken by the Minister in the exercise of his powers and the performance of his duties in accordance with this Act and the Regulation shall be deemed to be

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existing in (1) Crown Lands; (2) Submarine Lands. After 1976, the word "Crown" was replaced by "State" and "Governor- General" by "President".

2. Petrol. Act, 1969, Preliminary Interpretation s. 2(1)(f). This interpretation finds support in the common law. See Borys v. Canadian Pacific Rly and Imperial Oil Ltd. (1952-53) 7 W.W.R. N.S. 546, at 550, using an interpretation in Glasgow Corp. v. Farie (1888) 13 App. Cas. 657.

> made or taken by the government and shall be binding thereon."[3]

In its present form, the Government, in exercise of their responsibility of having petroleum rights vested in the state, has entrusted its administration to a Minister responsible to Cabinet and created a ministry for this purpose. The Ministry of Energy then becomes the focal point on which an investigation of the administrative structure of the industry should begin.

(1) Ministry of Energy and Energy Based Industries

(a) Function and Purpose

The Ministry of Petroleum and Mines was established in 1963[4] in order to centralise all activities relating to petroleum in one ministry under the supervision of a minister. Such structuring was also intended to ensure better overall co-ordination and control of the industry in the optimisation of its potential. As one study observed, it was to

> "ensure through regulation, supervision and development where required, that the petroleum and other mining industries and related

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3. Petrol Act, 1969, s. 5. In Preliminary Interpretation, s. 2(1)(e) "Minister" is defined as "member of the Cabinet to whom the responsibility for the subject of petroleum and mines is assigned".

4. Trinidad and Tobago Royal Gazette, 16 June 1963.

> operations in Trinidad are developed, operated and expanded to their maximum potential consistent with their optimum contribution to the nation."[5]

Although the intention, as outlined in the above organisational study, has remained the same the Ministry is presently conceived as fulfilling a more all embracing function. Its name has been changed to the Ministry of Energy and Energy Based Industries[6] to take account of its changing role. However, with the advent of more state enterprises as vehicles for developing and regulating particular areas of the industry, the role of the Ministry should be defined more restrictively.

In the present setting the Ministry of Energy has a three-fold purpose. It is regulatory, enterpreneurial and advisory. The regulatory functions are defined by the Petroleum Act, 1969 and the Petroleum Regulations, 1970 which seek to administer petroleum activities in accordance with laws which prescribe minimum standards of operation and create a uniformity of treatment. In this role, the Ministry would seek to exercise control by encouraging beneficial activities and repressing harmful or undesirable ones as defined in the law and within the parameters of

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5. Peat, Marwick and Mitchell, Organisational Study of Ministry of Petroleum and Mines, Aug. 1968, p. 1-1.

6. Hereinafter called the Ministry of Energy.

defined policies. Its entrepreneurial function is to promote investment and to seek a development which is financially remunerative and encourages the spirit of free enterprise, a necessary ingredient in a mixed economy. Lastly, the advisory purpose of the Ministry exists in its relationship to the Minister whom it advises on policy issues in the energy field. The advice, when approved of, could provide the basis for lawmaking in the form of regulations which are authorised under the Act.[7] This policy could also be used in the establishing of objectives for the industry as a whole. The Ministry is the most elaborately staffed, permanently constituted body for providing advice to government.

Within these tripartite functions, the Ministry provides the core of the government's policy and acts as the main vehicle for the realisation of its objectives. The specific duties of the Ministry could be broken down into certain practical functions dealing with legal, financial, technical and administrative matters. In this sense one could venture to provide the following points as its practical duties:

(1) Development of objectives, policies and plans, together with other bodies, for charting overall direction of the petroleum industry.

(2) Advising and formulating required legislation, drafting and negotiating contracts with oil

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7. Petrol Act, 1969, Part III, s. 29.

companies and receiving applications for licenses.[8]

(3) Supervising activites related to work programmes, exploration, drilling, production and refining operations in accordance with "good oilfield practice" as required by law and contracts.[9]

(4) Collecting data and information as required to be submitted by law.[10]

(5) Collecting royalties and fees due to the Government and collaborating with the Ministry of Finance on taxation matters.

(6) Advise and recommend, together with special committees, policies in such areas as manpower needs, conservation, pollution, safety, education and training.

(7) Co-ordinate ministry and government policies with other ministries, ad hoc committees, statutory bodies and companies.[11]

These duties represent the multi-faceted obligations of the body. It is the centralised organ which dominates the petroleum industry and in this sense all other bodies must co-ordinate with it, it is the pivot around which everything else revolves. In order to give effect to its duties the Ministry is organised into departments which handle specific issues or policies. This accords with the division of labour which is characteristic of systems

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8. Petrol. Reg., 1970, Reg. 3; Petroleum Regulation (Competitive Bidding) Order, 1973 and 1979.

9. See ss. 2:2, 2:2 and 6:1 of Model P.S.C.

10. Petrol Act, 1969, s. 12.

11. See Conference Report on Best Uses of Our Petroleum Resources, Govt. of Trinidad & Tobago, 13-15 Jan. 1975, hereinafter cited as Best uses of Petroleum Resources.

founded on the British civil service model. It is composed of both specialist and generalist and arranged in vertical and horizontal hierarchies.

(b) Structure

The Ministry of Energy is structured in a fashion which allows a streamlining of its various duties to departments and sub-divisions with an overall co-ordination resting with the Permanent Secretary, who is the administrative head of the Ministry and a direct link to the Minister. This sort of organisation has a political logic to it in that it remains a centralised ministerial dominated organisation which is monolithic in structure and controlled by a political head. It can be compared with those countries where there is a divesting of responsibility to a powerful and independent oil company as is the case in Mexico with PEMEX, Indonesia with PERTIMINA and Iran with the N.I.O.C. It appears that such divesting of power is not the policy in Trinidad.

In looking at the actual structure of the Ministry, one finds the following departments.

1. Energy Planning
2. Engineering
3. Geological
4. Legal
5. Geophysical Consulting
6. Administration and Personnel
7. Microfilm and Data Bank

8. Gas Engineering[12]

An investigation into the running of the more important divisions revealed the following duties:

(i) Energy Planning Section

This is relatively a new division, created in 1978. It is staffed by economists and financial planners who are entrusted with the responsibility of creating an energy plan for the industry. This plan is to be designed after consideration of the fiscal needs, rate of resource depletion, conservation and use of energy resources. The section would also be responsible for monitoring the plan. In this sense, it is a policy unit within the Ministry.

(ii) Engineering Division

This division is staffed by petroleum, civil, mechanical and reservoir engineers who provide technical expertise in a very technically inclined industry. Its main areas of operation include drilling, refining, secondary recovery and conservation. Being involved with the actual daily running of the industry, it is one of the most important for checking and evaluating the activities of the oil companies and determining whether its practices constitute "good oil field practice" under the law.

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12. See White Paper on Natural Gas, Govt. of Trinidad and Tobago, 1981, p. 14.

(iii) Geological Division

The work of this section is in the compiling, evaluation and analysis of geological information. It also provides maps and studies connected with the petroleum geology and potentially petroliferous areas, both areas which are extremely important for an efficient Ministry. Seismic studies would also constitute part of its activity either on its own or in conjunction with U.N. or joint venture contracting interest, as has been the practice. A draughting section within this division provides exploratory and development maps and aerial photos while the mining and petroleum inspectorate, a relic of the colonial administration, is responsible for plant and site inspections.

(iv) Legal Division

The advisory and general legal work which is required by the Ministry is done by this division. It also involves the drafting of leases, licenses and production sharing contracts and other agreements in addition to securing their enforcement under the law. Revising of the oil laws and their consolidation in addition to the determination of the legal status and incorporation of companies is undertaken here. Under the Petroleum Act, 1969 the Minister has been given power to determine the materiality of certain breaches and the right to initiate legal proceedings for a stay of execution in some

matters,[13] the legal division would instruct the Minister in such matters. However, because of its small staff, much of the major legal work is in fact given to private firms or the Ministry of Legal Affairs.

As evident from this brief investigation, the Ministry of Energy is multi-faceted and defined along specialised lines. The basic premise on which it operates is that of a centralised administration with departments functioning on a division of labour principle under the co-ordination of the Permanent Secretary. Such structure is intended to facilitate specialisation and administrative independence. It requires a staff which possesses an expertise on the particular areas of its operation. However, due to the better conditions of work and salary of the private sector, one finds that the Ministry is usually lacking in important personnel. In addition the political patronage present in the civil service results in passivity in the employees and a frustation and alienation of staff. People of ability often pursue careers other than those of civil servants and so the machinery of the ministry is rendered lacking or ineffectual in practice.

The Permanent Secretary, a public officer is the administrative and supervisory head of the Ministry's entire activities. His role is all-encompassing in that he keeps the Minister informed, reviews and approves work and

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13. Petrol Act, 1969, ss. 17(c), 20(2).

assignments performed by officers directly supervised, receives reports from divisional heads, negotiates and holds discussions with oil companies, keeps activities of the Ministry within the parameters set by the governmental directives and reports on the Ministry annually. Such broad individual responsibility is dangerous for it could mean the whole "character" of a Ministry could be assumed from its chief administrative officer, while its oligarchic structure can induce passivity among the ranks.

In looking at the Permanent Secretary, one can identify certain basic roles.[14]

1. "Management Function" which involves overall responsibility for the implementation of policies and programmes of the Ministry.

2. "Co-ordinating Function" whereby departments within the Ministry are kept together and their duties are performed in a co-ordinated manner.

3. "Policy Advisory Function" where the officer serves as a link to the Minister in offering advice on matters of policy concern.

4. "Future Analysist Function" involves the offering of projections and forecaast based on trends and productions. This is linked to the policy advisory role.

The Permanent Secretary is indispensable to the Minister because the latter initially knows little of the Ministry while the former would have worked for many years within

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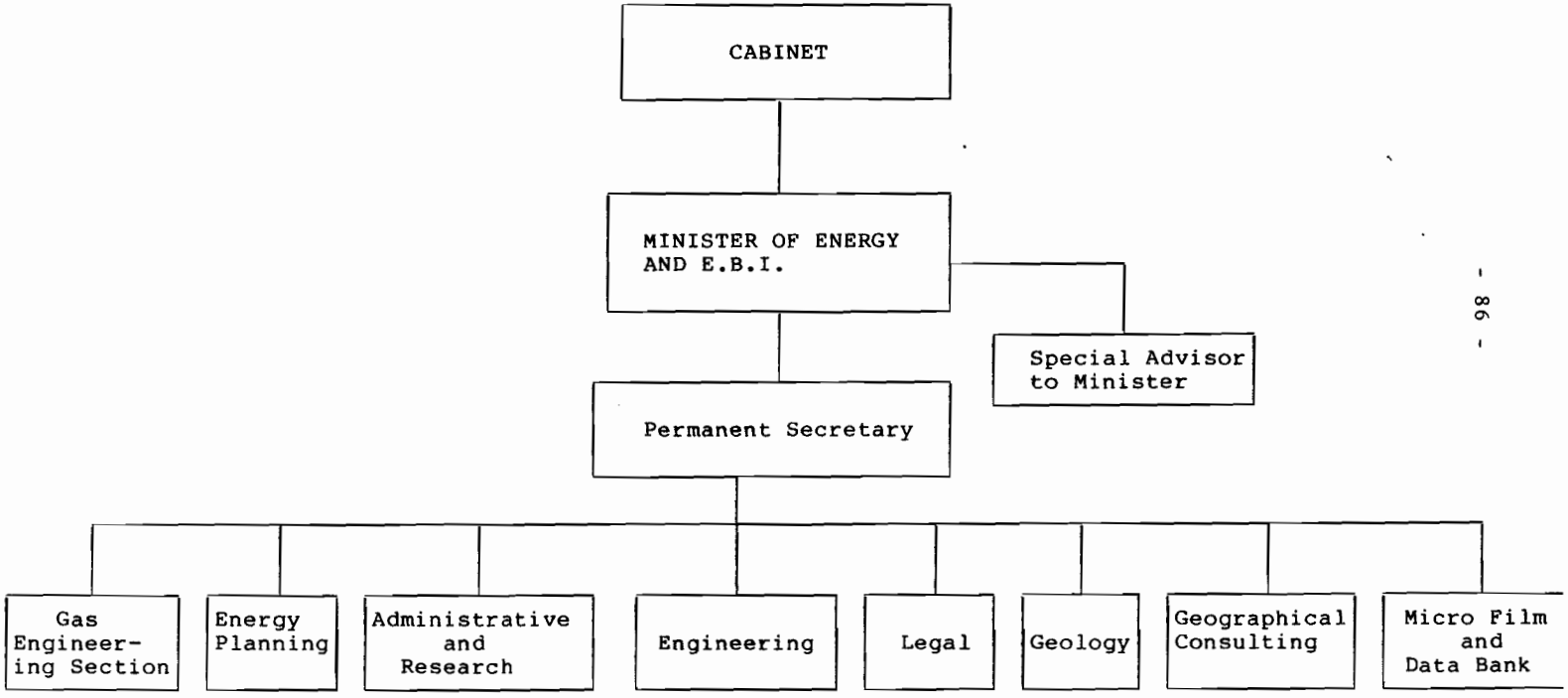
14. See Development Administration: Current Approaches and Trends in Public Administration for National Development, U.N. Doc. ST/ESA/Ser. E/3, p. 146.

it. He is also the link between the Minister and the Ministry. The Minister is the supreme co-ordinator and the one who is responsible to the Cabinet and Parliament for the workings of the entire Ministry.

The benefit of such an organisation is in its entrenchment and permanence. It offers a central policy making unit which is aware of government objectives, consistent in its approach and integrated in its efforts. A centralised network of civil servants would offer the stability and continuity necessary for daily administration of the petroleum industry, though it is questionable whether it creates the proper environment for self-growth and objectivity. Presently, its lack of a full contingent of personnel has rendered it an overworked and understaffed Ministry. The government, in recognition of its deficiencies in this respect and others in running the petroleum industry, has resorted to "ad hocracy" as would be shown later.

TABLE III: ORGANISATIONAL CHART OF MINISTRY OF ENERGY AND ENERGY BASED INDUSTRIES (E.B.I.)



Source: Compiled by Author.

2. Relationship between the Ministry of Energy and Other Bodies

(a) Ministry of Energy - Ministry of Finance

A Ministry of Finance houses the financial centre of the state and carries the responsibility for the mobilisation and allocation of financial activities. Incorporated within its organisation is a planning unit from which policy directives originate and an auditing department which provides a watch-dog service over financial affairs. In Trinidad, a close relationship arises, out of necessity, between this Ministry and the Ministry of Energy, which is the state's largest revenue earner (61% of total current revenues in 1979) in matters relating to, among others, finances, financial planning, budgeting and taxation.

The Petroleum Taxes Act, 1974 contemplates a consultative relationship between the Ministry of Finance and the Ministry of Energy in two cases; first, where they are required so to do and secondly, in those cases where it is "necessary and expedient," as the Act states:

> "In addition to the case where they are required by the Act so to do, the Minister (of Finance) and the Minister of Petroleum and Mines shall whenever it is necessary and expedient so to do consult with each other for the purpose of the performance of any duty or the exercise of any power respecting which they are authorised or required to perform or exercise under or by virtue of this Act."[15]

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15. Act 22 1974, Petroleum Taxes Act, 1974, s. 3, hereinafter cited as Petrol. Taxes Act, 1974.

There are three main cases when a consultation is actually required under the Act. The most important one is in fixing the price for crude oil, as the Act states:

> "The Minister (of Finance), after consultation with the Minister of Petroleum and Mines, (later Energy) is hereby authorised and required to fix by order the prices for petroleum won and saved in the production business of any person."[16]

The other case in which consultation is imperative, is in order "to fix the price or the basis for determining the price of petroleum products disposed or deemed to have been disposed of by the refining business to the marketing business" both within and outside of the country.[17] Hence, the Minister of Energy, in fixing orders relating to the pricing matters of products is called upon to consult with the Ministry of Finance.

There are also cases when it might be "necessary and expedient" to do so, within the terms of the Act. Before the Minister of Finance allows a deduction in ascertaining taxable profits for any expenditure incurred with respect to the plugging of a "development dry hole", it is necessary for the Ministry of Energy to first state what is

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16. Petrol. Taxes Act, 1974, Sch. 2, s. 5(1). See also Petrol. Act, 1969, s. 30 which authorises the Minister to make Orders.

17. Petrol. Taxes Act, 1974, sch. 2. 6(1) and 6(5)(b).

considered a "development dry hole".[18] Also, the Ministry of Energy is called upon to certify whether, in a production business, commercial production has been achieved in order to decide whether a company qualifies for annual allowance benefits in ascertaining taxable profits under s. 23(2) of the Income Tax (In Aid of Industry) Ordinance.[19] The actual rate of production which constitutes commercial production is also to be decided by the Ministry of Energy.[20] Indeed these are instances which are contemplated by the Act as occasions when consultation may be required. However, the Finance Ministry in the assessment of fiscal liability, may find it necessary to draw on the advice of the Energy Minister who is seen as being more familiar with the "technical aspects of the petroleum industry and the activities of the companies."[21] In understanding the relationship between these two ministries it should be pointed out that the Ministry of Energy has much more direct contact with the oil companies and is also more familiar with their actual operations. When the Finance

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18. Id., s. 14(5).

19. Id., s. 15(2).

20. Id., s. 15(3).

21. Peat, Marwick and Mitchell, Organisational Study, loc. cit., supra, note 5, pp. 111-2, see also Introduction, p. 4. Also note, "Mostofi Report", p. 60 where the purpose of consultation in assessing taxes was to ensure "that the financial obligations of operating oil companies are met equitably and in accordance with agreement."

Minister seeks his advice, it is done in order to give the fiscal laws a fullness of meaning and an accuracy in their application.

The Ministry of Energy also operates as a collecting agency for the Ministry of Finance with respect to certain fees and money which by law are paid directly to the former. These fees[22] are then paid over to the Finance Ministry. The Energy Ministry then has to obtain its operating budget from the Finance Ministry from amounts collected as the petroleum impost. This impost is a tax on petroleum and natural gas which is "necessary to cover all the annual expenses of the Ministry of Petroleum and Mines (now Energy) including salaries, pension contributions, maintenance and other expenses of or incidental to the due administration of the petroleum industry".[23] One can say then, that the Finance Ministry is responsible for the budgetary allocations of the Energy Ministry while the latter operates as a collector for the revenue with respect to certain fees. This joint operation is sanctioned in law

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22. Including petroleum operating license fee, transfer fee,oil impost payments, seismographic survey fees, sales of reports and maps and royalty on crude oil and natural gas. Annual Administration Report, Ministry of Petroleum and Mines, 1976, p. 22.

23. Petrol Act, 1969, s. 73. The actual rates are determined by the Minister of Energy and published as a Rating Order as in Oil Impost Rating Order, 1971; see also, Petrol. Act 1969, s. 72.

which requires,

> "expenses incurred by the Minister (of Energy) or any other government department shall be charged to the Consolidated Fund and any sums obtained by the Minister or government department including petroleum impost shall be paid to the Exchequer Account and form part of the Consolidated Fund."[24]

The Exchequer Account and Consolidated Fund both come under the jurisdiction of the Ministry of Finance. Given such a framework, the relationship between the bodies is inevitable and necessary.

In the Taxation of petroleum as a responsibility on its own, the Ministry of Finance would appear to have exclusive jurisdiction. It is entrusted with the "general administration" of the Petroleum Taxes Act, 1974 and its amendment, Petroleum Taxes (Amendment) Act, 1981 in addition to "collection and recovery" of taxes under the Acts. These would be all taxes on production, refining and marketing operations including the newly created Supplementary Refining Tax (S.R.T.) and Supplemental Petroleum Tax (S.P.T.). Within their responsibility would also be general corporation taxes, withholding tax, unemployment levy, bonuses and rentals, all related to the petroleum industry. The Ministry of Finance is the main vehicle for overseeing the fiscal policies of the state. Its role was contemplated in even wider terms with the introduction of the Petroleum Taxes (Amendment) Act, 1981, which sought "to

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24. Petrol. Act, 1969, s. 33.

enhance the degree of state administrative control over the petroleum industry" by introducing a permanent pricing committee and new direct taxes on production and refining.[25]

Fiscal administration is exercised by the Board of Inland Revenue[26] which is within the Ministry of Finance. In 1974, the Oil Audit was established as a section within the Board of Inland Revenue in order to facilitate a better working relationship in taxation matters. Its purpose was to:

1. Advise the Minister of Finance on the determination of a tax reference price for oil.

2. And later, when fair market price was used instead, to work with the Ministry of Energy and to seek advice from the Permanent Petroleum Pricing Committee[27] in determining a "fair market value" for assessing oil companies gross income.

3. Assess and collect taxes due from oil companies under the law.

This was an attempt to create a specialised sub-department within the Ministry of Finance which would deal exclusively with oil companies. Its work was seen as involving both auditing and accounting of company accounts as a means of

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25. Presentation of Bill entitled "An Act to Amend the Petroleum Taxes Act 1974" (Second Reading) by Minister of Energy and Energy Based Industries, s.10, 22 April 1982. Mimeo. Min. of Energy.

26. Income Tax Ordinance, s.3.

27. Act 5 1981, Petroleum Taxes (Amendment) Act 1981, Sch. 11, s. 6A, hereafter cited as Petrol Taxes (Amend.) Act, 1981.

arriving at their accurate fiscal liability. However, a requirement for its success was that trained and experienced people were available to service its manpower needs and this unfortunately, is lacking.

In the overall structure, the fiscal affairs of the petroleum industry can be said to be handled by the Ministry of Finance which works in consultation with the Ministry of Energy. Administratively, the former is more involved in regulation within the terms of the oil taxation legislation while the latter obtains its directives from the general petroleum laws. Inevitably a finance ministry assumes the role of a "supra-ministry" for its purpose is budgetary co-ordination and fiscal planning of all ministries. As a result, the Finance Ministry handles all fiscal matters relating to assessment, collection and planning while the Ministry of Energy provide the technical assistance necessary for making such tasks more accurate and current.

It has recently been the policy for the Government to ferment their most important policy directives in ad hoc bodies which serve as feeders for ministries generally. It is this which has given rise to an "ad hocracy" as shall be investigated now.

(b) Ministry of Energy and Cabinet Ad Hoc Bodies

(i) Existing Bodies

Introduction

Realising the need for expert, independent and advisory opinions on matters of importance to the oil and gas industry, Cabinet sought to free some civil service technocrats from the bureaucracy engendered in a ministry and together with outside experts created "supra ministerial bodies". Some were asked to formulate policy while in other cases they were to co-ordinate areas which were considered important to the industry. The rise of these bodies seemed to have resulted from a need for independent advice from people with knowledge and experience which would serve to supplement the deficiencies of the civil service. In a sense, it is the recognition of the shortcomings and lack of creativity from within the bureaucracy which compelled such action. Advisory ad hoc bodies, as they may be termed, report directly to the Cabinet, which has the power of "general direction and control" of Government.[28] Their power is recommendatory within the terms of reference of their establishment. However, these recommended policies, if accepted, could form the basis for laws or policy directives or objectives for the Ministry of

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28. Constitution Act, 1976, s. 75(1) "the Republican Constitution".

of Energy or other ministries. The actual committees would now be examined.

(1) Committee on Petroleum Conservation[29]

This group was formed to prepare and develop a hydro-carbon conservation policy after studying the existing oil and gas production schemes. Its terms of reference were to make recommendations on

> "alternatives that will extend the productive life of the existing fields and at the same time stabilise the revenues generated by the petroleum industry"[30]

and to indicate lines of action which would indicate more offshore exploration activity. This was in the light of an absence of any properly formulated binding policy in this area. The group itself was composed of technical officers from the Ministries of Energy and Finance and worked in close collaboration with the Permanent Secretary of the Ministry of Finance. In its recommendations it calls for, inter alia, a National Energy Plan.[31]

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29. Appointed by Cabinet, Minute No. 1946, 1 June, 1978.

30. Report on Proposals for the Development of a Hydrocarbon Conservation Policy, Govt. of Trinidad and Tobago, 6 Nov., 1978, p. 2, hereinafter cited as Report on Conservation.

31. Id., p. 3.

(2) Permanent Petroleum Co-ordinating Committee

This group was established in recognition of the need for proper co-ordination of activities in the light of the divided implementation of government policies. It is comprised of the Permanent Secretary in the Ministries of Energy and Finance, the Chairman of the Inland Revenue Board and of the National Energy Commission. They were asked to perform the function of:[32]

1. Co-ordinating the various activities of the petroleum sector.
2. Reviewing reports submitted by other committees which were established to look into particular areas of the petroleum industry.
3. Studying the rate of depletion of hydrocarbon.

Appointment was made by a Cabinet mandate and the body was above ministerial responsibility. Its composition saw the heads of all the important bodies concerned with the energy industry working together. It appeared to be the highest co-ordinating committee which would oversee the entire industry while streamlining the work of Cabinet by providing it with only those suggestions it considered worthy of implementation. In spite of all of this the body has only met infrequently and comprised individuals who were already overworked and overburdened with responsibility. It appears to be a futile attempt to satisfy a

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32. See Budget Speech, Govt. of Trinidad and Tobago, 1980, p. 17.

satisfy a desperate need for a permanent co-ordinating body.

(3) Permanent Petroleum Pricing Committee

This is not a Cabinet appointed body but rather a legislatively created unit to work in conjunction with the ministries in determining oil prices.[33] It is constituted by officers of the Ministry of Finance, Energy and the Board of Inland Revenue. As its name suggests, it is concerned with the pricing of oil and gas. In order to do this it looks at international market prices for similar crude or "reference crude", the "reference crude" market, price setting structures, interest and transportation charges and differentials and any other relevant considerations.[34] All of this is done in order to arrive at a "fair market value" in cases where the "realised price" is not at arm's length. In pricing natural gas, this body has a similar responsibility and so monitors international prices and non arm's length transactions.

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33. Petrol Taxes (Amend.) Act, 1981, Sch. 2, s. 6A.

34. Presentation of Bill entitled "An Act to Amend the Petroleum Taxes Act 1974" (Second Reading) Minister of Energy and Energy Based Industries, 22 April, 1981, pp. 17-19, Mimeo. Min. of Energy.

(4) Legislative Proposals Committee

This Committee was appointed in 1979 to make recommendations and provide a report for the changes in legislation dealing with oil taxation. It was formed in response to requests from oil companies who complained of increasing cost and inflation and the non-deductibility of certain fiscal charges for U.S. tax credits. The Committee was mandated to make changes to the tax law which would ensure an adequate rate of return to the companies and continued development of the local industry. The recommendations of the Committee which provide the basis for the Petroleum Taxes (Amendment) Act, 1981, gave more incentives to investors, priced crude and natural gas by arm's length prices and introduced new taxes on the industry. The members of this Committee comprised officials of the Ministries of Finance and Energy and the Solicitor General's Department.

One can make certain observations about the emerging trend of using adhoc and specialised bodies in the petroleum industry. First, it shows a need for planning and coordination over and above the ministries. Secondly, important areas of the industry such as taxation and conservation are being investigated only when a need or crisis arises, rather their direction should be charted in advance and in accordance with a master plan. Thirdly, the rise of "ad-hocracy" would deprive the administration of the benefit of permanently constituted bodies which could provide a

consistency in approach. In addition, there is need to incorporate fresh views such as those from persons other than technocrats, such as the trade unions, university and consulting interest in order to make such planning a meaningful supplement.

(ii) Disbanded and Non-Functioning Bodies

The Government's record of disbanded and non-functioning bodies attests to its attitude of experimentation with policies. The duplication of its efforts over the years clearly shows a the lack of consistency evident with a lack of properly considered organisational structure.

(1) Co-ordinating Task Force

This was a body composed of high level technocrats combined with a ministerial team which was responsible for monitoring developments and progress made in the economy and which reported to Cabinet. The National Energy Corporation, a holding company, which was established in 1978 superseeded this Task Force. One of the objects of the N.E.C. is to "include existing activities of and take responsibility for the Co-ordinating Task Force".[35] During the existence

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35. Budget Speech, Govt. of Trinidad and Tobago, 1978, p. 67.

of this Task Force, it provided annual reports of its operation and the industry but its shortlived nature prevented it from proving its effectiveness.

(2) National Petroleum Company

In exercising its entrepreneurial and commercial endeavours, the Government established this public corporation under the National Petroleum Company Act, 1969 to undertake "exploration, exploitation and management of petroleum resources of the country".[36] The establishment of the company was more the realisation of a status than of viable company, for it was pointed out on its creation that since the country had now become a fully producing oil country, this warranted the formation of a national oil company.[37] In reality, the company has been held in abeyance while the nationalised holdings of Shell Trinidad Ltd., now TRINTOC, has functioned as the state oil company. In 1974, the idea of a statutorily created national oil company was again in the air after a State mission visited the Middle East. However, at the present time, there exists only a limited liability company incorporated under the domestic company laws which acts as a national oil company.

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36. Act 33 1969, National Petroleum Company Act, 1969.

37. Budget Speech, Govt. of Trinidad and Tobago, 1970, p. 3.

(3) Petroleum Institute

In 1974, the idea of training personnel to monitor and assume the responsibilities of the local oil and gas industry was toiled with.[38] The idea was a good one and has been implemented in other countries[39] while in the case of Trinidad it was intended to develop improved oil techniques as they relate to oil exploration in the country. Although funds were allocated for the project, it was not seen as a priority in terms of the broader requirements of the country.[40]

(4) Other Bodies

An Energy Secretariat along the lines of a permanent co-ordinating body was established with the country's more experienced and knowledgeable persons in petroleum matters. However, it was disbanded prematurely after a shortlived operation. In 1975, there was also mention of a Ministerial Energy Sub-committee and a Ministerial Energy Committee, the former being to implement an "action plan"

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38. See, Budget Speech, Govt. of Trinidad and Tobago, 1974.

39. See generally, V.V. SHASTRI, Research and Training in State Petroleum Enterprises in Developing Countries, in State Petroleum Enterprises in Developing Countries, New York, Pergamon Press, 1980, pp. 123-140.

40. See, Budget Speech, Govt. of Trinidad and Tobago, 1980.

conceived of at a government conference in the same year.[41] Nothing more was heard of these bodies.

Conclusion

These bodies are independent of the Ministries and intended to assist with the policy work which cannot be performed in the ministerial organisation. These supra-ministerial technocrats are intended to advise, monitor, review and overseer the workings of the industry. Consequently, they spare the Cabinet the task of tediously sifting through the issues involved in running the multi-faceted petroleum sector while allowing them a retention of ultimate adjudication and decisional power. Such an attitude is theoretically sound, however, the overlapping of personnel, the overworking and overburdening of a few senior officers, and the constant recruiting of staff from ministries renders the recommendations a reiteration and rehashing of existing policy. The co-ordination of bodies has become ineffectual due to the non-functioning of units and shortage of staff. A situation has arisen where there is no relationship between planning and advising in that these bodies give on the spot remedies for problems which arise. This highlights the lack of serious planning and

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41. See, Best Uses of Petroleum Resources, loc. cit. supra, note 11, p. 12.

policies as instrument of long term growth. As a suggestion, there can be established one body, a National Energy Advisory Committee, which undertakes the entire planning of the petroleum sector. It should be staffed by a small group of experts who represent the most knowledgeable persons in the industry. This would be discussed later on when making recommendations for reform.

3. Sectoral Corporations

(a) National Energy Corporation

Introduction

A change in the latter half of the 1970's saw a policy towards diversification of the energy sector and the use of state enterprises to overseer this development. The idea was to create autonomous commercial entities to develop the resources of gas and oil for the optimum national benefit by investing in energy based projects.

The National Energy Corporation was first conceived of and accepted in principle in 1978 as a state holding company,[42] however, it was not until 1979 that it was incorporated under the Companies Ordinance[43] as a private

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42. Annual Report of the National Energy Corporation, 1979, p. 1, hereinafter referred to as N.E.C. Annual Report.

43. Laws of Trinidad and Tobago, 1950, No. 1, c. 31.

limited liability company.[44] In the line of authority, this company would come under the jurisdiction of the newly created Ministry of State Enterprises, a de facto division of the Ministry of Finance or Corporation Sole, a name assumed after its incorporation by legislation in 1973.[45] The N.E.C. is also legally outside of the control of the Ministry of Energy and its sphere of operation relates to the development of energy based projects assigned to it. In this role, there are important companies in the oil and gas sector which are under its aegis.[46] These are:

(i) Trinidad and Tobago Oil Company (TRINTOC)
(ii) Trinidad-Tesoro Petroleum Company Ltd.
(iii) National Gas Company of Trinidad and Tobago.
(iv) Trinidad and Tobago National Petroleum Marketing Company Ltd.

Such an approach highlights the state's intention to enter into the commercial field, to diversify and to create different heads of authority.

The N.E.C. is under the authority of the Ministry of State Enterprises, formed in 1981, which is essentially an accounting and auditing ministry concerned with the

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44. The report which advised on its structure and guidelines was Report of the Working Group Appointed at the Conference on the Role, Functioning and Perspectives of State Enterprises, 16-17 July 1979. Mimeo. Min. of State Enterprises, hereinafter cited as Working Group Report, 1979.

45. Act 5 1973, Minister of Finance (Incorporation) Act, 1973, hereinafter cited as Incorporation Act, 1973.

46. N.E.C. Annual Report, 1979, p. 2.

financial and economic performance of state companies. It would work in collaboration with the office of the Auditor General in reviewing financial statements, annual accounts and budgets and in reporting to the Ministry of Finance. Responsibilities of this nature have evidently been delegated from the Corporation Sole, which in addition to being the lawful holder of shares and investment which the state holds in these enterprises,[47] was the body where "machinery had been established to supervise the activities of companies in which Government held shares, to enable the preparation of appropriate reports for submission to the country ...".[48] The form of supervision exercised is similar to that of a substantial shareholder and included "being represented at annual meetings of the company" and to "assist all the companies from time to time in meeting financial problems."[49] It can be said that, within such an overall framework, the N.E.C. was viewed of as fulfilling the role of, inter alia, being an agent for the Corporation Sole in matters related to energy, an energy projects division for sectoral development and a liaison organisation with public utilities and other government organisations for these

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47. Incorporation Act, 1973, ss. 7(a), (b).

48. Hansard Parliamentary Debates, Vol. 16, 1972-73, Col. 408-409. For Senate debates on Ministry of Finance (Incorporation) Bill, see Hansard Parliamentary Debates (Senate) Vol.12, 1972-73, Col. 568-576.

49. White Paper on Public Sector Participation in Industry, No. 2, Govt. of Trinidad and Tobago, 1972, p. 6.

projects.

(i) Function and Objectives

The N.E.C. is entrusted with the duty of translating governmental policies and national economic objectives in the field of energy into defined sectoral objectives and programmes of action. Such objectives are within the policy directives of the Ministry of Energy and within those legally defined roles of its own Memorandum of Association and those of its subsidiary companies. Its own Memorandum of Association states its object to be, inter alia,

> "(a) to plan, develop, facilitate and promote directly or indirectly the orderly exploitation, management and utilisation of the hydrocarbon resources of Trinidad and Tobago;
>
> (b) to co-ordinate, stimulate, facilitate and promote the development and integration of the hydrocarbon based and energy intensive industries of Trinidad and Tobago and all associated companies; ...
>
> (c) to offer all kinds of technical, managerial, administrative, planning, training and advi sory services and assitance of the hydrocarbon based and energy intensive industries and to establish model uniform practices and procedures;
>
> (d) to search or prospect for, examine, explore, win, purchase or otherwise obtain mineral oil, gas and any other substance ...".[50]

Given such all-embracing duties, the N.E.C. assumes the role of a holding company offering general supervision of

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50. Memorandum and Articles of Association, N.E.C., 12 Sept. 1979, hereinafter cited as Memo. of Assoc. N.E.C.

its subsidiaries while offering planning, co-ordinating and advisory services. It also reports on these to the Ministry of Finance. Its shortcoming lies in a very ill-defined legal relationship with its subsidiaries which seem to operate quite independently of the N.E.C.[51].

Perhaps one can suggest the nature of the relationship by looking at the Government report which established the guidelines and objectives of these companies. In that report, the holding company was recommended to have the power to co-ordinate and rationalise the plans and programmes of its subsidiary companies, assess their working, achievements and financial performance and to make recommendations or directives for improvement.[52] If such is the

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51. In an interview with the Legal Adviser to Trintoc, the National Oil Company, he was unaware that his company came under the aegis of the N.E.C.

52. Working Party Report, 1979, op. cit., supra, note 44, p. 32. See also "Launching Ceremony of the NEC and the IMO," Address for Minister of Energy and Energy Based Industries", p. 3. Mimeo, Min. of Energy, 2 Nov. 1979 where the creation of the N.E.C. was explained as follows:

> "... the Government's intention was to create a number of holding companies which would perform the vital co-ordinating and supervising functions with regard to state enterprises. The need for this type of activity was underscored because of the general experience with a number of state enterprises, some of which even failed to adhere to exsiting laws and regulations. Furthermore, the arrangements for contact and discussion between the Government and the state enterprise was too loose, giving rise to misunderstandings, a lack of adherence to policy guidelines and an occasion, a waste of resources. The concept of the holding company

(contd.)

relationship, while it has not been clearly defined legally, it would imply much less independence than necessary for the corporate subsidiaries. Further, there is intended to be a close working relationship between the bodies in so far as corporate planning and policy issues are concerned. It is questionable whether this exists and also if the companies are aware at all of their legal relationship to the N.E.C. As an institution, the N.E.C. bears great resemblance to the "sectoral corporations" used in some other countries[53] for sectoral planning and policy in the achievement of the objectives of its subsidiaries. However, as would be discussed at the end of the chapter, one could query whether the conditions for its success are too stringent.

This then brings us to the relationship between the N.E.C. and the Ministry of Finance, to which it is accountable. In establishing the N.E.C., the idea was to create autonomy of commercial operations in an industry where significant investments are involved and to give expression to a spirit of free enterprise and entrepreneurial development. However, in the legal delegation of duties one finds that the Minister of Finance can exercise serious restraint

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form of organisation was to make for a more effective operational relationship between the Minister of Finance - Corporation Sole - and the state enterprises."

53. See Italy, E.N.I. National Oil and Gas Agency; Sudan, Public Sector Corporations Act 1971; Guyana, Public Corporations (Amendment) Act 1971.

on these objectives by having jurisdiction over the N.E.C. in any matter relating to[54]

> "(a) investment in any project or otherwise of an amount exceeding 1,000,000:
>
> (b) creating any debt in excess of 10% of the issued share capital or 1,000,000 whichever is less;
>
> (c) creation of any long term debt of three years or more;
>
> (d) dissolution or liquidation or sale, lease, transfer, mortgage or other disposition of all the business and fixed assets of the company or of any part thereof in excess of a value of 1,000,000;
>
> (e) merger or consolidation of the company with another company or reconstruction of the company;
>
> (f) capitalisation of profit;
>
> (g) approval of capital and operating budget;
>
> (h) establishment of reserves and the amounts, purpose and conditions thereof;
>
> (i) negotiating, making or entering into foreign loans and foreign consultancy agreement."

This could limit the role of the N.E.C. and make its functioning much more constrained and less independent one in its commercial activities. In addition the directors are also to comply with "all the several and specific directions given in writing by the Minister of Finance."[55] If used too often, such a reservation of power to a political head

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54. Memo. of Assoc. N.E.C., op. cit., supra, note 50, s. 86, A-5.

55. Id., s. 85.

could see serious encroachments on the intended commercial independence of the N.E.C., and can result in its supervision by political rather than commercial principles.

(ii) Structure of the N.E.C.

The N.E.C.'s emphasis is on management, co-ordination and financial planning. Its purposes require it to have the manpower to deal effectively with subsidiaries and provide services which are required for a more efficient performance. In order to achieve this, it has been arranged with the following divisions:[56]

1. Project Development and Co-ordination Division.
2. Financial and Corporate Planning Unit which also handles training, recruitment and manpower planning.
3. A Management Service Division, to evaluate management systems, negotiate new contracts for equipment, services and terms of transfer of technology, legal services, internal audit and industrial relations.

The emphasis in this structure, is on providing a supra planning unit which overseers fiscal and management services in addition to co-ordinating projects. It also seeks to be an evaluation unit for projects undertaken or to be undertaken. Again, while this approach appears to be

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56. Budget Speech, Govt. of Trinidad and Tobago, 1979, pp. 24-25.

sound in theory, it would be interesting to see how a difference of opinion as to project planning between the N.E.C. and one of its subsidiaries is handled. The N.E.C.'s role in practice seems merely to report on energy projects rather than to direct the manner for their undertaking, and this is clearly evident from its annual report.

The relationship between N.E.C. and the Natural Gas Transmission Company will now be considered.

(b) National Energy Corporation and its Subsidiaries

(i) N.E.C. - National Gas Company.

The N.G.C. was established in 1975 as a private limited liability company under the Company Ordinance. Before 1975 the production, transportation and sale of natural gas were conducted by the individual companies involved in the petroleum industry. The actual sale of the gas went to the electricity company, Trinidad and Tobago Electricity Commission (T. & T.E.C) and the local fertilizer company, Federation Chemicals Ltd. The 1975 establishment of the company was in response to a need to administer a gas supply contract from AMOCO Oil Co. Ltd to the electricity commission and to handle the purchasing and selling of gas to local customers in the post 1975 period. The actual objects of the company were listed as[57]

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57. Memorandum and Articles of Association, N.G.C., 1975, s. 3.

"(1) To carry on in all or any one or more of its branches, the business of buying, selling, transporting, manufacturing and processing gas including natural gas and products therereof; and

(2) To carry in all or any one or more of its branches the business of producing, refining, storing, transporting supplying, selling and distributing petroleum and other oils and any other products thereof".

It is proposed to make reforms to the present system through a Natural Gas Act[58], in order to accomodate the supervisory role of the N.E.C. as a government holding company. The actual right to purchase natural gas from producers and to sell it to consumers is intended to be within the jurisdiction of the N.E.C. while the N.G.C. would retain the substantive role of the transporter and distributor and would be renamed the National Gas Transmission Co. (N.G.T.C). It is submitted that this could be achieved through duly authorised changes in the Memorandum and Articles of Association of the company. Such a change would allow the N.E.C. to negotiate the purchase price, on criteria set by Government, a right to process the gas and a right to "consultation"in gas plant modification or establishment.[59] The N.E.C. would then play a more consultative role in such matters as demand and supply, gas policy and utilisation while the N.G.T.C. would serve to

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58. See generally White Paper on Natural Gas, Govt. of Trinidad and Tobago, 1981.

59. Id., p. 15.

implement its policies and would be responsible for the natural pipeline system for gas transportation.[60] The N.E.C. and N.G.T.C. would have to give way in certain areas to the government and the Ministry of Energy. The N.E.C., though entrusted with the responsility of buying and selling of gas, would have to do so in accordance with set criteria which would be established by cabinet, who in turn are to be advised by a special technical team consisting of officials from the N.E.C, Ministry of Energy and Finance. The Ministry of Energy would retain those residual rights in the regulation of a natural gas field in so far as it is allowed by the Petroleum Act and by the dictates of government policy. A further role for the Ministry would be in the negotiation of existing licences and production sharing contracts so as to allow for state participation and

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60. The offshore East Coast dry gas is being used for the existing and planned chemical and manufacturing diversification industries under the Point Lisas Industrial Estate. In order to transport this gas, the N.G.C. is involved in a phased development of the cross island pipeline system of the country. It started in 1976 with a 47 kilometer line from Beach Field to Picton of a 0.61 meter diameter submarine pipeline. In 1977, a 45 kilometer line of 1.6 meter diameter submarine pipeline from Teak B platform via Poui field to Galeota Point. The other phase comprised of a 20 kilometer pipeline of 0.5 meter diameter across the Guayaguayare Bay. The last section was the 21 kilometer pipeline of 0.5 meter diameter between Picton and Point Lisas. The entire pipeline system operates from submarine areas in the East to the West of the island and carries 11.3 million cub. meters per day of gas. Two additional pipelines are planned from the North to East Coast to transport a total of 26 million cub. meters per day by 1985.

financing of commercially exploitable reserves of gas. It is forseeable that if a negotiable rate of return on invested capital is allowed, participating investors should be willing to undertake further exploratory drilling under the legislation. The Minister of Energy would retain the right to grant pipeline licences for the transportation of gas[61] and to designate "common carrier pipelines"[62] for the establishment of a more rational and cheaper source of transportation.

In the overall structure of operations in the area of natural gas the Ministry would retain a responsibility for planning, policy and negotiation and assume an advisory role to the Minister in the exercise of his powers under the Act. In consultation with the N.E.C. Cabinet would retain the right to authorise the criteria for price setting. The N.E.C. would act as a supervisory holding company in securing the implementation of policy, acting in liaison with government and also having the legal right to purchase and sell gas. The N.G.T.C. would remain the commercial arm having day-to-day responsibility for the administration of sales.

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61. Minister of Energy Speech, "Industrial Development Policy", House of Rep., 9 Mar. 1979. Mimeo. Min. of Energy.

62. Petrol. Reg. 1970, ss. 26, 27.

(ii) The N.E.C. and Other Subsidiaries

The N.E.C. by virtue of being a sectoral holding company in the petroleum industry has been entrusted with the supervison of certain other companies in the industry. Although the relationship between these "subsidiary" companies and the N.E.C. is not documented in any legal form, and in fact has been denied existence by at least one official,[63] it is clearly recognised as existing in the N.E.C. annual report.[64] The subsidiary companies themselves operate quite independently in their commercial practices and as limited liability companies are accountable to the Board of Directors and general meeting. The N.E.C. is supposed to operate as a type of corporate planner towards these companies.

TRINTOC is a limited liability company incorporated under the domestic Companies Ordinance and fully owned by the state. It came into existence when the government purchased the interest of the Royal Dutch/Shell Group called Shell Trinidad Ltd., in 1974. As a commercial venture, it owns a refinery and has a joint exploration and production licence with Texaco and Trinidad-Tesoro in addition to ones held on its own. It is proposed to discuss this company in more detail later in this work.

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63. Interview with legal adviser, TRINCTOC, Nov. 1982.

64. N.E.C. Annual Report, 1979, p. 1-2.

The Trinidad-Tesoro Co. Ltd. is a joint venture interest between the government and the Tesoro Petrol. Co. (U.S.) in which the government holds 50:1% of the shares. The state is presently negotiating the takeover of the remaining 49:9% of the shares.[65] It is also a commercial venture which is involved in exploration, production and sale of crude oil and natural gas.

Lastly, the National Petroleum Marketing Company came into existence in 1972 when the government acquired the assets of B.P. Caribbean Ltd. In 1973, 50% of the marketing operations of Esso Standard Oil were vested in the new N.P.M.C. while in 1977 the marketing assets of TRINTOC and Texaco were added. The main products marketed by the company include gasoline, gas oil, diesel oil, kerosene and liquid petroleum gas. Their local sales are subsidised by the state and their prices are legally fixed.

These companies function quite independently of the N.E.C. They have all, however, submitted reports to the N.E.C. giving outlines of the work and projects they are involved in. The N.E.C. has reported on these activites by giving details of stage of work, cost, contractor and date of completion.[66] It is not clear what form and structure their interrelationship takes.

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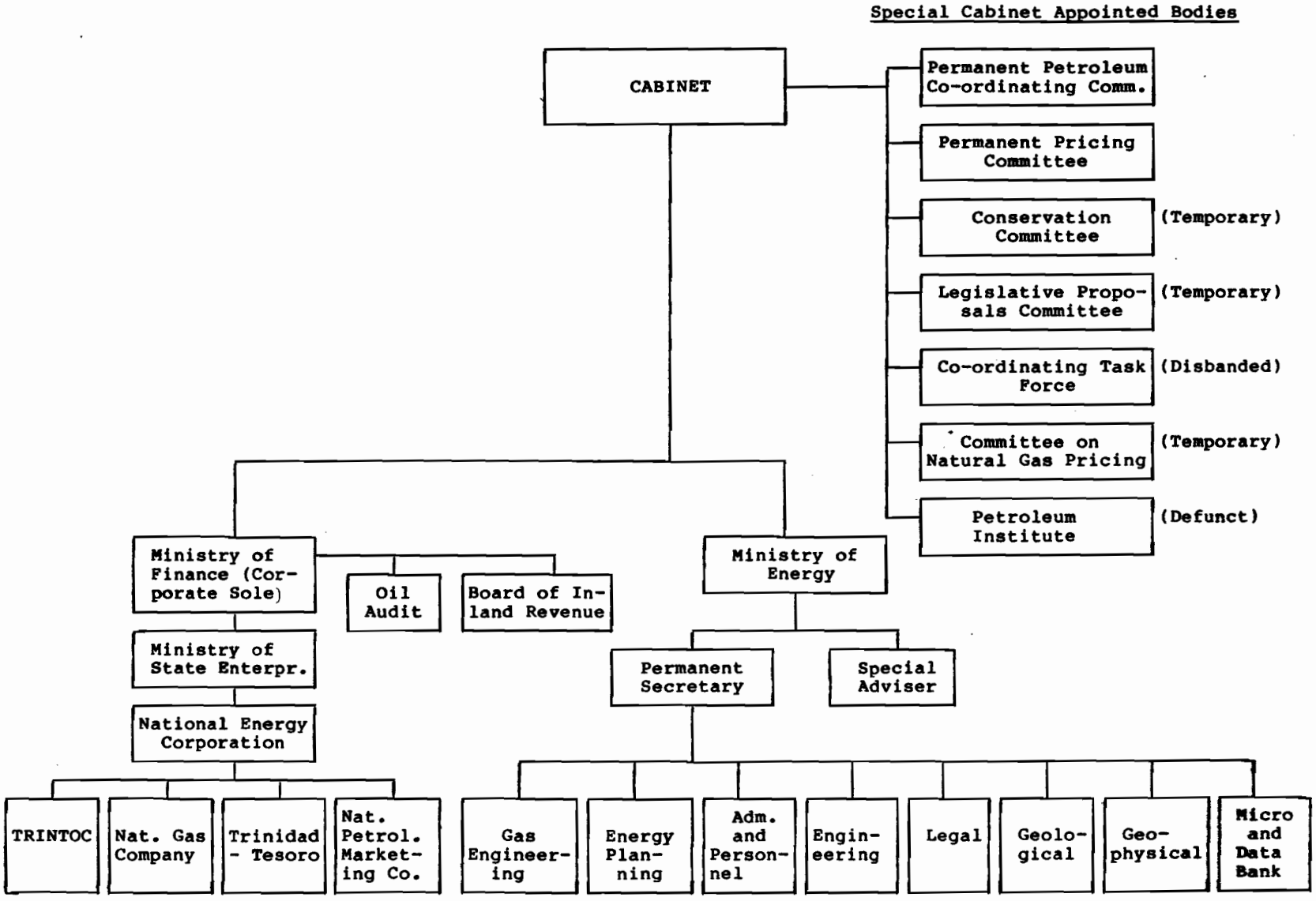
65. New York Times Newspaper, 22 Oct. 1982.

66. See N.E.C. Annual Report, 1979, pp. 38-54.

TABLE IV: Illustrative Diagram of Administration of the Petroleum Industry



Source: Compiled by author

B. EVALUATION AND RECOMMENDATIONS FOR REFORM

(a) Evaluation

The present administrative structure presents the onlooker with a policy of institutional experimentation. Bodies are created and disbanded or used periodically or used only for a particular project. No clearly defined well thought-out policy appears to exist. The administration is weak and functions inefficiently. There is no relationship between institutions and their purpose or indeed any interrelationship between one institution and another. The basic reason for this is due to an unwillingness by the government to decentralise control. Structures are monolithic and rigid and dependent on ministerial discretion for functioning. Indeed, this shows a certain political logic.

A major requirement is the need for definition. The purpose, function and structure of bodies needs to be clearly expressed and their mandate abided by. The present form does not suffer from a lack of institutions and bodies but rather from proper functioning ones which fulfill the purpose for which they have been formed. A good example would be the National Energy Corporation, N.E.C. It was intended as a holding company yet there has been no divesting of shares from the Minister, as Corporation Sole, of those shares which are to be held by the N.E.C. The Corporation Sole is the statutory incorporation of the Minister as a holding company for the state. As a result, it is in limbo regarding its status and function.

This lack of definition of purpose is also responsible for the non-declaration of a comprehensive energy plan which outlines the objectives of the industry. This would also guide bodies in so far as they constitute national policy guidelines to work by, and so relieve them of the necessity to consult the Minister. The lack of proper co-ordination and linkage between institutions and the need for a legal declaration as to their relationship, has seen a piecemeal effort at integrating the industry as a whole.[67]

The second problem relates to manpower and expertise. Although this is partly a problem of underdevelopment, it is necessary that the state's policy not operate to worsen it. Given the dearth of qualified and experienced people in most phase of the industry's operation it is advisable to have cohesive groups rather than fragmented divisions. The creation of the N.E.C., for example, saw an exodus of personnel from the Ministry of Energy which is now operating below staff capacity. A high turnover of personnel also takes place because of the frustrations of government bureaucracy. In addition, the politicising of decision-making and the oligarchical structure of

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67. This was apparent in conducting interviews. For example, the officials of the Inland Revenue Dept. were unaware of the holdings of the Library at the Ministry of Energy, the best petroleum holdings in the country. The Library, on the other hand, was unaware of the fact that all documents of a major U.N. Conference held in the island, existed three streets away at the Revenue.

administration has seen the non inclusion of such informed groups as the university and trade union. Such sources can see the injection of fresh new views rather than the re-hashing of ideas which presently takes place.[68] Clearly then, the present policy makes for a lack of consolidation of all interests and a dispersal of available manpower over the various departments and bodies. This has given rise to a system of short term planning through the use of ad hoc bodies.

The rise of adhocracy is perhaps the largest single problem. It represents the most serious fault in the present administration, short-term planning. Planning denotes a preparation and strategy for events which have not yet arisen. In Trinidad, a "plan" is required only when a crisis arises and so "effects" rather than "causes" are being tended to. Further, the grouping of individuals at a time of crisis is invariably for the purpose of writing a report rather than actual planning. The latter involves a process of implementation. Adhocracy in planning has meant that policies are short term and the body lacks the continuity required for success and implementation. In addition, the concentration of work on a few individuals who are already overworked and occupied with

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68. For example, the Chairman of the N.E.C. acts in a similar capacity in the Iron and Steel Co., Fertilizer Co., Industrial Port Dev. Co., Permanent Petrol. Co-ordinating Co. and sat on the Committee on the role of state enterpries.

other duties has not encouraged a proper rethinking of purpose and strategy.

The use of ad hoc bodies could work well if not so much dependence was placed on them and they worked alongside a permanently constituted national planning and advisory board. In this way, the temporary units would provide a useful meeting of minds to solve particular problems in an independent fashion and free from the bureaucracy within which they ordinarily operate. A delegation of work in this fashion could also be helpful in providing fresh overviews of existing or proposed policies.

The use of the sectoral holding and supervisory corporation in the form of the N.E.C. is a good idea. To create an umbrella company to develop, analyse and review sectoral project planning is a useful and good suggestion. In theory, it would allow the Ministry to address more important policy issues, provide common services, seek a rationalisation of the industry and promote inter-company co-operation and planning. However, the stringent requirements for its success in addition to the need for a strong integrated national oil company, may support a case for its reversion to a special unit within the Ministry of State Enterprises. For the N.E.C. to be successful it would need to have a totally decentralised control, autonomous decision-making and set criteria established for its operation and evaluation processes. Criteria and not ministeral supervision should dictate its operation. It is difficult to see such

a separation existing in a body which is in reality an extension of the Ministry itself and under an administrative tradition where the Minister assumes supreme decision-making power.

The last body for evaluation is the Ministry. Presently, the Ministry of Energy is understaffed, cumbersome and suffers from a total breakdown in the work ethic of the civil service. It is a weak body. Its role is largely regulatory although it proposes to provide planning and some advisory work. In reality, most of its work and staff have been "hived off" but it retains a residual importance because the Minister presides over it. Attention has not been given to the need for its reorganisation in the light of burgeoning state enterprises in the energy sector. In truth, it remains the headquarters of the industry's paperwork.

The present arrangements do not facilitate an efficient, modern and organised structure for running an important and dynamic industry. There is little co- ordination, planning and research and what small staff is available is dispersed and overworked. A clear and defined organisational arrangement is required and officials are at a loss as to where authority really lies. Legal relationships between the bodies are indistinct. Responsible for this structure, is the unwillingness of the state to have real decentralised bodies which work by set criteria rather than ministerial discretion and veto. The answer lies in a

smaller specialised operation which is efficient and has clearly drawn lines of operation and authority.

(b) **Recommendations for Reform**

In approaching suggestions for reform one can see four main features of the present system and incorporate institutional arrangements to suit these needs. It can be approached by designing a model for administration whch seeks to satisfy:

1) Regulatory functions

2) Advisory functions

3) Entrepreneurial functions

4) Co-ordinating functions.

A decentralised system is necessary. This means that the basis of all decision-making is not ministerial and all activities do not revolve around the Minister.[69] Institutions should be made to operate on their own discretion and set criteria.

In the first case, the regulatory agency. This should see the reorganisation of the Ministry of Energy along the lines of an Inspectorate, with primary

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69. See for example, Nigeria, which has disbanded its Ministry of Petroleum Resources and formed a Nigerian National Petroleum Company which has an entrepreneurial arm and a regulatory arm in the form of a Petroleum Inspectorate. Nigerian National Petrol Corp. Act, 1977, s. 4.

responsibility for regulation, enforcement and supervision of the industry according to the Petroleum Act. Its mandate for operation should be defined in law with clear job classification and duties based on a three-fold separation of control, administration and legal duties. The reorganisation of the Ministry is inevitable when one establishes a national oil company and support bodies for co-ordination and planning.[70]

The responsibilities for commercial and operational matters together with planning should be removed from the Ministry. All entrepreneurial operations should be handled by the national oil company and planning, by a special body dealing in this matter. Its primary purpose would be to safeguard the performance of the laws and regulations. All

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70. See for example, the case of Norway. The Petroleum and Mining Division was redirected to the Ministry of Industry after Stat Oil, the national oil company and the Norwegian Petroleum Directorate, a regulatory and supervisory agency was formed. See Report No. 30 to the Norwegian Storting (Parliament) 1973-74, Operations on the Norwegian Continental Shelf, pp. 22-26, Ministry of Industry. Also note, Appendices 5, 6, 7, pp. 85-87 for diagramatic illustrations of these bodies. With respect to the definition of duties and purpose of the Ministry under statutory instrument see New Zealand, Ministry of Energy Act, No. 33 of 1977, N.Z. mimeo. Ministry of Energy (N.Z.), s. 11 which reads:
"The Ministry shall advise the Minister on the formulation implementation, co-ordination, and continuing review of effective and efficient policies for N.Z. relating to energy."
And Peru, Decree Law 17527, 21 Mar., 1969, Art. 7 which establishes the structure of the Ministry of Power and Mines, where its power is stated as "to facilitate the social-economic development of the country.

reports, documents, studies and classifications would be housed in the Ministry which would have an enlarged administrative and legal staff. Drafting of documents, contracts, loan and note agreements together with safety, conservation, pollution and library facilities would be housed here. The Minister should retain his role as head, for he would still be the administrative and political head of the industry. Also, he would provide the requisite link for co-ordination and informing Cabinet of the industry's progress. Larger data banks, computerised facilities and collected and analysed information concerning acreages, geology, geophysics, development and exploitation should be available. Its form would be smaller and more mechanised to allow for efficiency.

The second function is advisory. This should include planning, research and development. A National Petroleum Advisory and Planning Board (N.A.P.B.) should be established as a permanent body. Its primary function should be to advise and formulate policy. If stated, it should be to:

1. Advise on national policies, interest and matters in promoting the effective development and utilisation of the oil and gas resources.

2. To review existing policies and projects and to formulate new ones together with programmes which allow for diversification and integration of the industry as a whole.

3. To monitor on its own and jointly international developments and trends in the petroleum industry.

This body would assume the corporate and strategic planning of the petroleum sector and identify areas of development. Reports and suggestions should be forwarded directly to an inter-ministerial co-ordinating committee which can screen and consolidate proposals before being presented to Cabinet.

The composition of the board should reflect a broad cross-section of specialist interest and contain the most knowledgeable and experienced petroleum personnel in the country. Interest represented should include trade union, university, legal, corporate planning, accounting and finance, marketing, engineering, monetary and an energy analyst. A national energy advisory and planning body is a recognised organ in many countries with a developing petroleum industry.[71] In the case of Trinidad, the N.A.P.B. should receive briefing from the Ministry of Energy and the

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71. See Malaysia, National Advisory Committee for Petroleum (N.P.A.C.) whose chairman is the Special Economic Advisor to the Prime Minister. N.P.A.C. works in conjunction with the National Oil Co., PETRONAS and the Civil Service through its Petroleum Development Unit. See U.N. Doc. ESA/NRET/AC.11/CP/17, pp. 2-5, 11/1/78, U.N. Inter-regional seminar on State Petroleum Enterprises in Developing Countries, Vienna, Austria. In Columbia, there is a National Petroleum Council which is a technical and advisory entity annexed to the Ministry of Mines and Petroleum and composed of a lawyer, engineer and financial expert. See Decree 3102, 27 Oct., 1954 establishing National Petroleum Council. In Brazil, a National Petroleum Council directs the national oil company, Petrobras, which has to submit to it an annual plan of its activities, report to the N.P.C. See Decree 40,845, 28 Jan. 1957 governing relations between N.P.C. and Petrobras.

national oil company as to their operations and suggested course of action with possible half-yearly meetings arranged for dialogue. However, it should operate as an independent "think-tank".

As a body, it would provide the conceptual framework for advancing the industry and define clearly the national goals to be achieved. By giving it pre-eminence over all other planning and advisory bodies, it means that the most knowledgeable minds would be channelled into one body and so provide a cohesive unit without the fragmentation which presently exist. Its most important function would be to institutionalise planning and advisory services and so make for a permanence and continuity of approach.

The entrepreneurial function would be handled by the national oil company. As would be discussed later on in this work, this would also be reshaped and consolidated to create a more integrated body. For the present purposes, it is only necessary to say that this would represent the commercial and operational arm of the state's policy. The present statutorily created National Petroleum Company has the legal powers necessary for realising a monopoly interest in the oil, gas, marketing, refining and associated areas. The Ministry of State Enterprises would be accountable for its auditing and financial accountability and budget but the company would statutorily be accountable to Parliament. The N.E.C. which presently assumes responsibility for the state enterprises in the

energy sector, should be disbanded. Its place could be taken by a special evaluation, management consultancy and projects division within the Ministry. In addition, great attention should be given in defining the powers and relationship of the Ministry of State Enterprises to government-run and controlled companies.[72]

The final requirement would be to establish proper co-ordination. For this there should be established a supreme co-ordinating mechanism in the form of an Inter-Ministerial Co-Ordinating Committee comprising the Ministers of Energy, Finance, State Enterprises, Industry and Planning. This would co-ordinate all governmental policies and keep them in line with fundamental national goals and plans. It is only through a concerted effort to forge ahead with basic plans that overall development can take place.

The co-ordinating body would be supra-ministerial and since the policy and planning board would report directly here, these matters would be decided upon at this level rather than in the ministries. As a unit which is supreme to the entrepreneurial, regulatory and advisory bodies it can promote inter-institutional co-ordination.

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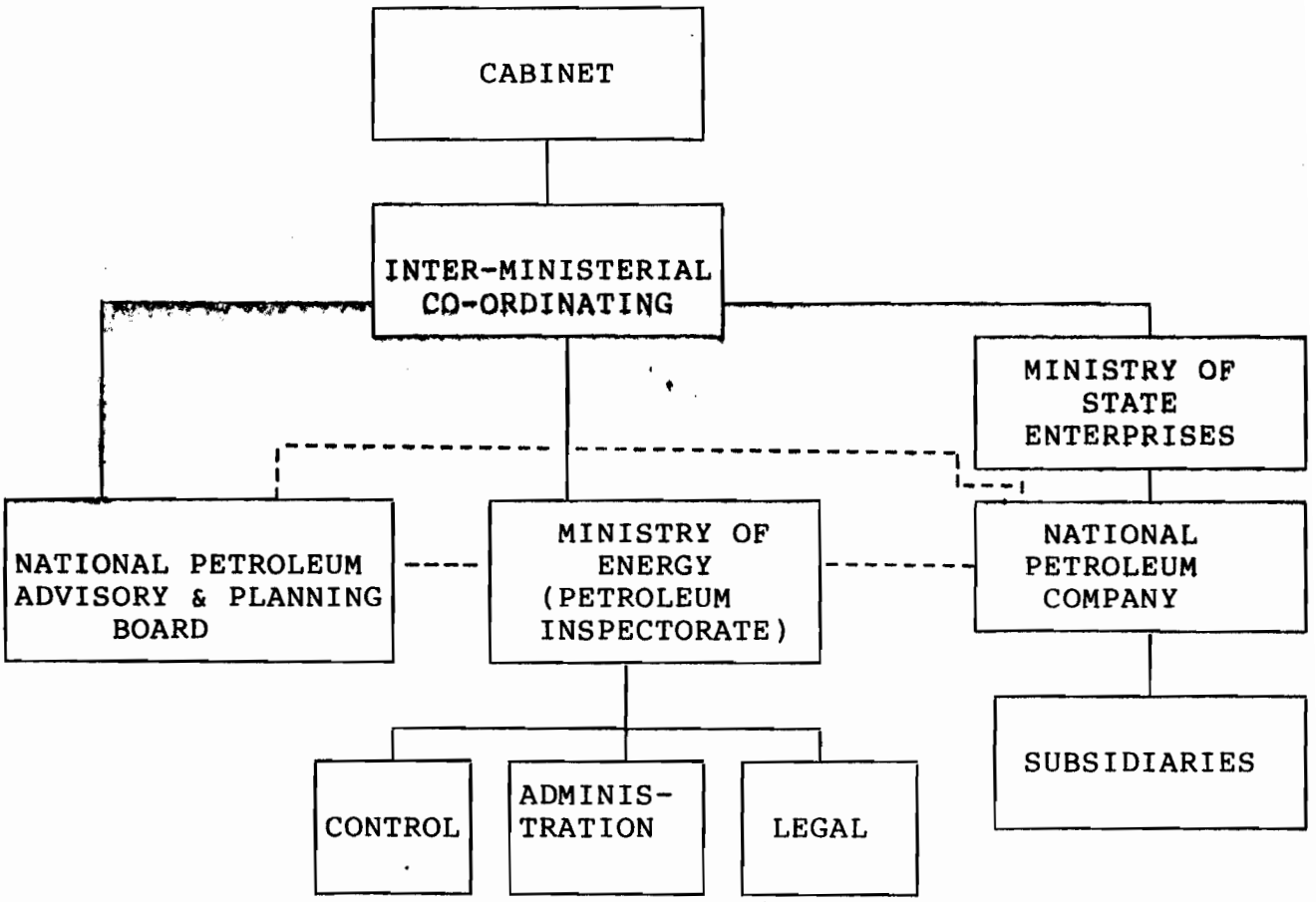
72. See for example, Italy, Ministry of State Holding in which "all state owned companies and shareholdings are transferred" and has power for "laying down the general directives for the various sectors controlled by the Ministry." See Law 1589 , 22 Dec. 1956, ss. 2, 4, establishing Ministry of State Holdings.

Moreover, its position allows it to consider policies and programmes before approval by Cabinet thereby giving an opportunity for rationalising these with national development objectives. It is foreseeable that, as a body, it may lack the know how to expertly analyse recommendations presented to it and so tend to make political and sometimes unwise decisions. However, this may be attributed more to the shortcomings of the political process. The main attraction of the suggested model is that the co-ordinating committee would be the recipient of information which has already been analysed and throughtout. Its purpose would be to choose from suggested alternatives and harmonise these with guidelines for development.

Given such a four part breakdown of the system, one can be more optimistic for meaningful and efficient administration. It represents the institutionalising of the main ingredients for a successful petroleum industry. However, its eventual success would depend on the individuals who undertake its implementation.

TABLE V: SUGGESTED INSTITUTIONAL STRUCTURE FOR ADMINISTRATION OF THE PETROLEUM INDUSTRY*



------- represents informal (briefings) relationship.
——————— formal relationship
——————— flow of authority

Source: Compiled by the author

CHAPTER THREE: THE OIL CONTRACT, ITS AWARD, RIGHTS, RESPONSIBILITIES AND REGULATION

A. THE AWARD OF EXPLORATION AND PRODUCTION LICENSES AND PRODUCTION SHARING CONTRACTS

1. Competitive Bidding System and Its Structure

In order to engage in petroleum operations on land or in a submarine area, one has to be a "licensed person", which means being the holder of a license or a production sharing contract.[1] These contracts can be obtained by one of two means, either through a written application to the Minister and ministerial consent thereto[2], or alternatively by means of a successful bid under a competitive bidding order.[3] The latter procedure is usually reserved for the allocation of areas which offer better prospects for oil discovery and for which the state demands better terms for its release. It is the intention here, to look closely at the workings and practice of this system.

Competitive bidding is one form of a system used in the discretionary allocation of prospective oil producing

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1. See Petrol. Act, 1969, s. 6 and as amended by Act 38 1974, Petroleum (Amendment) Act, 1974, s. 6.

2. See Petrol. Act, 1969, ss. 6-16 and Petrol. Reg., 1970, ss. 6-27.

3. See Petrol. Act, 1969, s. 10 and Petrol. Reg., 1970, s. 4.

areas where bids of work programmes and expenditure obligations are invited from qualified bidders. These bids, which are assessed according to certain criteria, are sifted through and a winning bid is selected as the one offering the most beneficial terms to the state. In terms of the common law of contracts competitive bidding orders seek to offer areas up for a bid, which can be seen as an invitation to treat upon which offers are made by companies. Should these be accepted, an agreement comes into existence.

The conventional wisdom associated with "work programme bidding" is that the state is making a transfer of marketable rights in return for legally enforceable commitments. The latter are performable as contractually prescribed and serve to develop the available resources of the state while offering the prospects of capturing economic rent in the future. In effect, the bidder offers more than merely a work programme for there is also a minimum expenditure obligation and some "up front" economic rent in the form of a signature bonus.[4] In return, the licensee

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4. The "economic rent" for a single field has been defined as "the total gross revenues at international market prices received from a petroleum field, minus total investments, minus total operating costs and minus total transport cost. The revenues, investments and costs should all be discounted for an appropriate discount rate in order to properly reflect the economic rent at that discount rate". See A.P.H. VAN MEURS, Modern Petroleum Economics, Ottawa, Love Pub. Co., 1982, p. 431.

receives rights which, even at the time of receipt and subject to rules on assignment, are redeemeable to another company for money. Such a allocation allows a state, which is either unable or unwilling to develop its resources on its own, a chance to have suhc development take place. There is also the prospect of capturing economic rent and other benefits through contractual and legislative provisions relating to taxation, participation, profit and production sharing among others. It is the promise of this development and future "take" which prevents the state from taking too much at the start. This would divert much needed capital from the investor. Its purpose is to subsidise the investor in the initial period and not to try to capture the prospective economic rent at the start. A useful comparison with this system is the "auction" system which is used extensively in the U.S. and has also been used in the U.K. As the name suggests, it is an auction at which bidders seek to outbid each other, in money, and in offering this greater sum so capture prospective oil producing acreages. This system relies on an ideal competitive atmosphere and excellent geological prospects for oil discovery. Unlike the competitive bidding system, most of the economic rent is captured at the start of the "lease sale".

Under the competitive bidding system, there is the need to establish a clear framework within which bidding can take place and the prospective economic rent can be captured for the state. One can notice, in the case of

Trinidad, the following basic requirements which allow the system to operate:

(a) Block Demarcation - A system of cutting up and dividing available acreages into blocks for bidding and surrendering.

(b) Pre-conditions for bidding and contracting - setting conditions for bids and requirements for qualification as a bidder.

(c) A Bid - A package of benefits which is offered to the state.

(d) Fixed Evaluation Criteria for assessing bids.

(a) Block Demarcation

In determining the size of blocks it is necessary that there should be a relationship between the size, the work programme for the area and the surrendering provisions. Blocks should not be too large in size. Large blocks would mean the allocation of an area which a company may be unable to properly explore while the risk exists, if oil is discovered, of having contracted out oil rich areas which could have been let on more lucrative terms had they been kept. There seem to be two attitudes which can be taken in deciding the size of a block. One is to allow a large area to be contracted out for an exploratory period but with stringent surrendering provisions attached to the lease. This gives an initial period when seismics and geophysical work could be undertaken while provision is

made for a part of the leased acreage to be returned to the state at a certain point. The other attitude, which assumes seismic studies have already been undertaken, is to determine block size in promising areas, according to their drillable prospects and the work program they can accomodate. This would mean that one block which contains only one drillable prospects would carry an obligation to drill one well while a two drillable prospect block, would see a two-well obligation and so on. A drillable prospect would exist where the expected profit is greater than the undertaken risk. In the case of Trinidad, at least in the 1973 competitive bidding grant, geophysical studies had been undertaken and prospects were excellent yet the allocated areas were still quite large (approx. 250,000 acres) which leads one to believe that there was no relationship between work commitment and drillable structures and that the obligation to make two drillings was moderate in the circumstances. It also meant that the state would not be in control of the rate of resource development for the company has a right to develop the entire area in accordance with its programme. This view finds support in one study undertaken for the government.[5]

Licensed blocks do not exceed the size of 425,000 acres which is constituted of five unit block sections of

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5. See Technical Assistance Committee Report, Group of Experts National Iranian Oil Company, Govt. of Trinidad and Tobago, Nov. 1974, p. 67, hereinafter cited as Iranian Committee Report.

85,000 acres each.[6] In no case is a grant of less than 500 acres allowed and licensed blocks are always constituted by contiguous unit blocks.[7] The system of block division follows a grid system along latitudinal and longitudional inter-sections which produces square or rectangular blocks.[8] Such packaging safeguards against irregularly shaped blocks and assist in their administration by facilitating easier surrendering and divisions. Sub-division for surrender purposes is pre-determined and illustrated on the map which is attached to the competititve bidding order which divides the licensed block into four sub-blocks ranging from 50,000-70,000 acres.

The surrender provision in the Regulations calls for a compulsory surrendering of two sub-blocks or fifty per cent (50%) of the licensed area "not later than the end of the sixth year from the issue of the license"[9] while the production sharing contract requires the same area to be surrendered not later than the end of the third year.[10] The idea behind such a provision is to hasten the

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6. Roughly 11 x 11 miles or 132.8 sq. miles. In Britain, these measured 8 x 16 miles and in Norway they were double that size.

7. Petrol. Reg., 1970, ss. 11(a), (b), (c).

8. This system is also used in Canada, Jamaica, Norway and Britain.

9. Petrol. Reg, 1970, s. 17(1).

10. S. 4:1 Model P.S.C.

licensee's exploration efforts since it is only from a thorough analysis of this information that a proper decision could be made as to what portions should be given up. Also, this prevents large areas from being tied up for very long periods and being "sat on" for on returning these areas to the state, the state has an option to re-license them. This reasoning would also apply to the voluntary surrender of part of the licensed areas under the right to partial determination of the area.[11] Surrendered areas are to "consist as far as practicable of rectangular blocks", for by maintaining the size and shape of these units they are still rendered marketable after being given up. Also, automatic surrendering provisions helps improve the relations between the parties. It reduces friction in so far as there is no need to negotiate the surrender of blocks held by the licensee.

(b) Pre-Conditions for Bidding and Contracting

As pointed out earlier, in applying for an Exploration and Production LIcense or a Production Sharing Contract there can be either a bid under a competitive bidding order or a general application subject to ministerial consent under the terms of the Petroleum Act. It is proposed to deal only with the competitive bidding order in this

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11. Petrol. Reg., 1970, s. 87.

section.

In making an application under the competitive bidding order for a license or a production sharing contract there are two basic requirements: an application fee[12] and a duty to provide certain specified information. The duty to provide information is necessary in order to make a determination as to whether a bidder is a "qualified bidder" or not, which is an initial screening procedure for applicants. So, for example, if a bidder lacked the necessary financial or technical competence to undertake the activities contemplated by the state, this party would be considered a non-qualified bidder and unable to pursue an application for one of the offered areas.

The information which is requested involves information relating to:[13]

1. legal identity;
2. technical capacity, competence and experience in oil industry operations and related activities;
3. economic and financial structure and backing;
4. available markets for the disposal of petroleum;
5. such other details "as the bidder may consider relevant".

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12. Petrol. Reg., 1970, s. 9 which requests a $300 fee half of which is refundable for rejected offers. In 1979, this was increased to $25,000.

13. See Petroleum Regulation (Competitive Bidding) Order, 1979, Sch. II, ss. 1(2)(a)i-v and Petroleum Regulations (Competititve Bidding) Order, 1973, ss. 1(3)(b)i-v.

The need for this type of information is to allow the state an opportunity to assess the financial and technical competence of an applicant.

As a reform, it is suggested that this obligation should go further in requiring more specifically enunciated data. An applicant should be made to provide annual reports, balance sheets, reports on the integrated nature of the company, its relationship to its parent and any other integrated structure, the petroleum requirements of the company and reports of its operations in other countries. A further duty should also exist to provide in addition to, "such other details as the bidder may consider relevant," "information which the government may request." Data of this type while allowing for an examination of the efficiency and capability of a company would also provide valuable information, if the applicant is selected, in monitoring the financial obligations of the company.

In addition to satisfying the fee and information requirements, bidders were requested in the 1973 order to purchase geophysical surveys of the offered offshore areas.[14] This allows the government to recover some of its capital since this information is sold. More importantly, it serves to strengthen their bargaining position for by being in possession of geological, geophysical and seismic reports on more promising areas, better terms

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14. Petrol. Reg. (Competitive Bidding) Order, 1973, Sch. II, s. 1(1).

could be demanded for their release.[15] Hence the state enjoyed an enhanced bargaining and negotiation position by being in possession of this information. Another factor which improved the state's position, was the negotiation of agreements from already drafted model contracts which provided the basic terms, conditions and rights associated with the release of the acreages.[16] Its value from the state's point of view, was that it established a "scrimmage line" from which terms could be negotiated and defined a modus viviendi for the carrying out of operations. As accurately pin-pointed by one author, it reflects "a pro-government point of view in the general framework of negotiations" and it goes well with the bidding procedure for there is a weeding out of the best offers for negotiation.[17] In addition to the model contract, the Ministry also provides information such as aerial photos, surveys

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15. The Government, with U.N. help, carried out seismic surveys off the country's marine and continental shelf involving some 3,000 sq. miles. See Annual Administration Report, Min. of Petroleum and Mines, 1968, p. 2. In 1972, Government in a joint venture with U.S. based Delta Exploration Co. Inc. conducted 1,300 line miles of marine geophysical survey off the coast of Trinidad and Tobago. It covered 1.8 million acres of unlicensed areas. 734,328 line miles were shot in 3.46 partymonths. By Dec. 1972, twenty-four interested companies had purchased the data and its interpretation.

16. Petrol. Reg. (Competitive Bidding) Order, 1979, Sch. 11, s. 1(1)(a).

17. D.N. SMITH and L.T. WELLS, Negotiating Third World Mineral Agreements, Massachusets, Ballinger Pub. Co. 1975, p. 156.

and geological maps from the Lands and Surveys Department, an indispensable component in any petroleum industry administration.[18]

If an applicant is then singled out as a recipient for a contract, there is the pre-condition that the company "establish and maintain during the existence of such license an office, place of business, branch or agency in Trinidad and Tobago for the purpose of conducting petroleum operations" which shall be run by a resident.[19] This business office woud facilitate the service of process and other correspondence under the law of the country. Successful bidders are required before commencing petroleum operations "to register under the Companies Ordinance or be incorporated thereunder", a requirement which makes the organisation amenable to the jurisdiction of the country and responsible to the national treasury for taxation levied on it in the course of operations.

(c) A Bid

Under the competitive bidding system for the allocation of blocks, one has to examine the "bid" or offer in

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18. See N. ELY, "Policy Considerations in the Development of Mineral Laws", (1970) 13 Natural Resources Lawyer 282, p. 287.

19. Petrol. Act., 1969 s. 23.

order to see the exact content of the package of benefits being offered by the company in exchange for exploration and production rights. It has been argued that the work programme bidding system is similar to the "auction" system, the difference being that one bids work contracts rather than money and the applicants are encouraged to "put their money into drilling wells rather than advanced payments to the country" with the possible result of encouraging a "going price" for blocks based on a work commitment and a drilling guarantee.[20]

In the case of Trinidad it would not be accurate to say that this is the position since bids have component parts consisting of a money offering, an expenditure and work commitment and certain non-fiscal benefits to the state. The state also makes it compulsory for bids to contain certain minimum undertakings. These are expressed as minimum obligations under the competitive bidding order and includes, inter alia, drilling plus a signature bonus, which is to be paid within ten days of signing the contract. The latter represents a monetary payment to the state at the start of the contract. At best, one can identify a "joint" system which draws from both the auction or money bidding system and the work program bidding structure.

The minimum obligation as outlined in the bidding orders has the ffect of establishing a basic level of work

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20. K.W. DAM, Oil Resources, Who Gets What How, Chicago University of Chicago Press, 1976, pp. 32-44.

and expenditure below which an applicant would not be considered qualified for bidding. No consideration would be given to an offer which does not accept these basics. They include, inter alia.[21]

(1) Commitment to drill not less than two (2) wells in each block to a dept of 15,000' within one year of the grant of the license and continuing until completed.

(2) Commitment to an exploration program for each block and the estimated cost thereof to be submitted at the time of bidding.

(3) Commitment to expenditure of a minimum sum on exploration operations during the first three years from the date of contracting, called an "expenditure obligation".22

These obligations represent the "work program and expenditure" content of the bid. There are also other benefits of a pecuniary and non-pecuniary nature. In terms of pecuniary benefits, the state also requests as stated earlier, the payment of a signature bonus on contracting which represents a capture of a small portion of the prospective economic rent.[23] A

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21. Petrol. Reg. (Competitive Bidding) Order, 1973, Sch. II, s. 4A and Petrol. Reg. (Competitive Bidding) Order, 1979, Sch. II, s. 4(2). See also, Petrol. Reg., 1970, s. 44.

22. The expenditure obligation in 1974 ranged from $8,000,000 [U.S.] to $15,000,000 [U.S.]. See Annual Administration Report, Ministry of Petroleum and Mines. 1974, p. 19, hereinafter cited as Annual Admin. Report, 1974.

23. In the Texaco/TRINTOC/Tesoro Consortium this sum represented $4,000,000 [U.S.], Annual Admin. Report, 1974, p. 19.

combination of both work and expenditure commitments and financial payouts at the pre-exploration stage can at best be described as a "hybrid" of the auction money bid and work programme bidding systems.[24]

The minimum work obligation as expressed in the competitive bidding order is to drill two wells to a specified depth and a commitment to an unspecified exploration program for each block, expressed only in monetary terms. A time framework is established by law for the carrying out of these undertakings in that exploration must start within one year of contracting[25] while drilling is to start within a stated time.[26] The "expenditure obligation" which is guaranteed by a bond or bankers guarantee,[27] is intended to be a commitment of expenditure to the block which would be available to carry out the exploration programme. It is a scaled annual expenditure over a three year period. These minimum obligations and performance bond guarantees give the state a commitment from the bidder, even before an allocation or rights take place, thus ensuring a certain basic

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24. See for a fuller discussion on this "hubrid", First Report on North Sea Oil and Gas, Public Accounts Committee, House of Commons Session 1972-73, at paras. 2890-3021 (H.M.S.O.).

25. Petrol. Reg., 1970, s. 48(1); Model P.S.C. s. 5:1 and Model License (Land and Submarine) s. 51.

26. Petrol. Reg., 1970, s. 49.

27. Id., s. 45(1).

exploration program for the country at the time of contracting.

In assisting with the use of an appropriate and speedier exploration effort, the block system is particularly appropriate. A block by block assessment of acreage, as established from geophysical studies, would make known the particular needs of each block. This means that work programs could be tailored to suit the specific needs of each block, with blocks which offer greater prospects for oil and gas discovery attracting a more concerted and thorough drilling and development program. As is evident it is a wiser policy for a state to be armed with its geophysical studies in soliciting bids under the work program system. Additionally, the submission of "sealed bids", as requested in the bidding order, is a safeguard which makes offers less vulnerable to collusion and introduces an element of uncertainty. This should cater to the submission of serious well-calculated offers.

On a note of caution, a suggestion could be made about the use of expenditure type commitments. Although such a system offers an obligation to spend a sum of money, it would be extremely difficult to keep track of true cost and expenditure within the integrated corporate network of oil companies. Companies often use a system referred to as "gold plating," which involves inflating exploration costs. Rather, the use of more commitments <u>in kind</u> would render the task of the state an easier one in monitoring and

recording activities associated with the program. Further, an expenditure obligation which is non-inflation indexed, as the contracts indicate, can see escalating costs reduce what appeared initially to be an ample budget to a mere skeletal contribution.[28]

The other part of the package, which serves to complete the bid, is made up largely of non-financial offerings realisable only in the event of a discovery of hydrocarbon resources. In the 1979 offering of production sharing contracts, an applicant was asked to make:

> 1. Proposals for scholarship and training of nationals in fields relating to the petroleum industry.29
>
> 2. An offer of production sharing on the attainment of petroleum production, starting with a 60% share and ascending with increased production.30

These were made two further pre-conditions in bidding. If an applicant proved to be a successful bidder, he then had to abide by further requirements on entering into the actual contract. These requirements were:[31]

> (1) Surrendering of fifty percent of acreage held, as the sub-division units within a time framework agreed upon.

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28. The Mobil P.S.C. allows cost escalation based on the U.N. Index of Manufactured Goods Exported from Developed Market Economies.

29. Petrol.Reg. (Competitive Bidding) Order, 1979, Sch. II, s. 4(2) (G).

30. Id., s. 4(2)(F).

31. Id., s. 5.

(2) Delivering of guarantees to the Minister for

(i) the total amount of the expenditure obligation;

(ii) the sum of $200,000 (T.T.) for performance of obligations under the contract.

(3) Maintaining of books of account with respect to the contract area for use by the Minister of Finance.

(4) Participation in a "National Oil Spill Clean Up Plan".

In the case of the exploration and production license offered under the earlier Competitive Bidding Order, 1973, the package of benefits, while having a financial input also contained significant non-financial requirements. Applicants were also asked to make offers for training and scholarships to nationals and also to maintain proper books of account and abide by surrendering provisions.

In 1973, a very interesting requirement existed. An option was to be given to the state, to have a "carried participation in a license up to 35% exercisable at any time within three years from ... commercial production".[32] This interest was a scaled escalation up to 51% participation on the attainment of a production rate of 350,000 b.o.p.d. In lieu of this arrangement, there was to be an overriding royalty, payment of a negotiated royalty, a sliding scale area rental and taxation. In the event of participation, the state would be exempt from all cost incurred by the licensee up to the joint participation

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32. Petrol. Reg. (Competitive Bidding) order, 1973, s. 3A.

took place and could also request financing from the licensee for their participation interest. This "carried interest" option was a very innovative concept which allowed the state an opportunity to have a definite working interest at a designated point in the operations. However, the main shortcoming of this 1973 offering was that it allowed applicants to make an offer for a production sharing contract in lieu of the exploration and production sharing license and thus an opportunity to pre-empt the requirements of the carried interest formula. Not surprisingly, four offers of P.S.C. were made to Texaco, Texaco-Tennaco, Deminex and Mobil. The P.S.C. did not offer an opportunity for participation by the state and exclusive rights to management and execution were in the hands of the contractor in spite of the state's wishes to become "more directly involved in the physical resources of the country".[33] Hence, the offer allowed the companies an opportunity to escape having a "carried interest". The shortsightedness of the 1973 Order in allowing companies to escape the state's participation interest was in fact brought to the attention of the government, at that time.[34]

If one takes an overview of the bid, it is possible to say that the Competitive Bidding Order which solicits

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33. Annual Admin. Report, 1974, op. cit., supra, note 22, p. 18.

34. See Iranian Committee Report, loc. cit., supra, note 5, p. 65.

offers, operates as a working document for bidders. It shortlists the state's request and proceeds to ask applicants to base their proposals under defined heads. There is a minimum drilling requirement and an expenditure obligation of a stated sum which make up the main component of the package. Other benefits arise when the contract is in an advanced stage of development and are benefits obtainable only upon discovery. In any event, these are largely benefits which are already written into the Regulations and so renders the Competitive Bidding Order a somewhat superfluous document. The bidding itself serves the purpose of realising some proceeds from the sale of geophysical information and solicits actual proposals for a work program and an expenditure budget. In this sense it formalises the offer by an applicant. Once all offers are in, it is then the duty of the Ministry of Energy and the Ministry of Finance to select the successful bidders based upon certain criteria. These will now be considered.

(d) The Criteria for Selection

Although certain criteria for selection of bids were outlined in the first offering of acreage in 1970, the criteria currently used are not documented. They have been deduced after studying the various information available. In 1970, the criteria outlined for selection included:[35]

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35. Annual Administration Report, Ministry of Petroleum and Mines, 1970, p. 24.

(1) Work programs proposed by applicants and availability of markets.

(2) Bonuses offered.

(3) Proposals for government participation.

(4) Other offers to the benefit of the people of Trinidad and Tobago.

(5) "Bonuses offered" would include the signature bonus paid at the start of the contract.

However, it stands to reason that the criteria for selection have been enlarged. This is evident if one looks at the detailed information requested at the bidding stage and the specific commitments requested under the Competitive Bidding Order. It is therefore possible to suggest the following heads as additional criteria which are also used. These are:

(1) Technical competence to undertake a programme of exploration and production for the area bid for.

(2) Capability to provide funds commensurate with work programme obligations, expenditure undertakings and drilling commitments as evidenced by performance bonds,

(3) "Experience in oil operations and related activities" which can be interpreted as an assessment of an applicant's overall performance to date in meeting license obligations and where there has been no license held, then its past performance in oil operations elsewhere. 36

(4) "Other benefits to the people of Trinidad and Tobago" would include scholarship and training programmes and social and educational benefits to the people.

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36. This criterion would raise questions about the Tesoro Oil Co. which was a virtual unknown until Trinidad.

In using these criteria for assessment of bids, the Minister of Energy would be making a decision after considering the "relevant factors" contemplated by law which must be "in conformity with the interest of the country".[37] A further requirement is that the Ministry of Finance should be "consulted" in making the determination, although this appear to be only a procedural requirement under the law.[38]

In looking at the criteria themselves one can make certain observations. It is clear that the criteria for selecting a company do not include an evaluation of the actual or a proposed work program to be carried out. A company makes a commitment to an "expenditure obligation" but there is no agreement on the actual work to be carried out. Under the P.S.C. this agreement only arises after the contract has been signed. The contractor only has to submit an annual work programme after the actual signing of the contract.[39] In the case of the exploration and Production License there is no obligation at all to submit a work programme. This means that exclusive operating rights are given before a detailed work programme is submitted. This approach may well be necessary in cases where an area is still under study. However in those areas where sufficient preliminary information is available, a proposed work program should be

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37. Petrol. Act, 1969, s. 5(2).

38. Ibid.

39. See Model P.S.C., s. 6(1).

required so as to show the company's approach to exploration and exploitation. This, while allowing an approach to be formulated at a preliminary stage, could also prove useful in ironing out differences on the work program which may arise very early after the contract has been signed.

Since the local industry is largely export-oriented, the "availability of markets" is considered to be an important requirement in assessing applicants. Consequently, the Amoco and Texaco holdings combined to account for the most substantial share of leased acreage. A consequence of the present criterion for selection is that large vertically and horizontally integrated companies stand a greater chance of being successful. This may well be a mixed blessing for while assured markets are obtained, it puts the state in a position where it has to contend with the problems associated with intra-corporate finances and complex consolidated accounting. Additionally, these companies would also satisfy the requirement of having the most varied "experience in oil operations".

The signature bonus is another factor considered in selection. It forms a part payment for geophysical information and contributes a lump sum payment of "up front" economic rent. As in the pure auction system, this payment would represent an important item in the overall selection process and depending on its weight, an inducement in the allocation of acreages. In the absence of a clear statement

as to the weight placed on each criteria, one can think of a situation where a company may offer a significant signature bonus and so obtain a contract, in spite of it being less efficient or thorough in its operations. A large "up front" payment can be a significant factor in determining whether to award a contract.

As a suggestion, it would be better administratively for bidders to be well acquainted with the detailed criteria used in the selection. These should be explicitly spelt out and published in a document which is to be made available to prospective bidders. Also, an indication should be given of the importance attached to each criterion so as to create certain "weighted" requirements. This method, in addition to making bidders aware of the importance of what is expected, would create a situation where certain individual benefits could be strengthened so as to make a stronger bid.

2. Appraisal of the System

The initial argument which could be made out is that the system of work program-expenditure obligation bidding is a subsidy system. The state subsidises the contractor to the extent that it does not collect its revenues at the beginning of the contract, as exists under the auction system, but rather postpones its claims to economic rent in the hope that proper and optimum development of the hydrocarbon resources would yield benefits in the future. In order to reap the benefits of this subsidy it is necessary to have a well constructed work program which demands

optimum use of the expenditure obligation on the contract area. It is questionable whether the state has an adequate say in the formulation of a working programme which is in its interest and the participation rights for its effective working. Moreover, the drilling requirements could be improved by having one well per drillable structure as determined by geophysical studies, a suggestion which was applauded as a "practical proposition" elsewhere.[40]

The pattern in the three offers between 1970-1979 reveals a dwindling interest in an area which has been quite extensively explored. In 1970, an offer for exploration and production licenses in twenty-six marine blocks saw twenty-six companies pay the registration fee for geophysical data. Of these, sixteen companies, fourteen American and two European, submitted bids for the 3,000 sq. mile area. The winning bids were awarded to three consortiums and two individual companies and included Deminex, AGIP, Phillips, Cleary, Apco Oil, Occidental, Amerada Hess, Oceanic Explorations, Santa Fe and Terra Ltd. This was a heavily subscribed offering which obviously was in demand. In 1973, an offer was made for either P.S.C. or Exploration and Production Licenses in six blocks ranging from 241,750 acres to 393,650 acres and comprising a total of 1,758,699 acres. Four P.S.C. were granted from this issue. By 1977,

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40. Iranian Committee Report, loc. cit., supra, note 5, p. 67.

some 7,000 sq. miles had been allocated in contracts and licenses of which roughly three-quarters was in the marine areas. The final offer was in 1979 and only P.S.C. were requested in areas in the east, south, west and north-west which were either surrendered or previously unlet blocks. In all eight blocks of some 1.4 million acres were put up for bid, the only takers were Mobil in a P.S.C. which has now ended and Trintoc, the national oil company, who were awarded a license. What is in evidence from these figures is a dying interest in the areas which are set out for bidding. This is due to a general concentration of exploration work at home by U.S. companies and a diminishing interest in an aging oil basin. Hence, it is questionable whether the competitive bidding system would continue to flourish in a setting where there is little or no competition for offered acreages and there is not a multiplicity of bids to create the appropriate selection of offers from which to choose.

As pointed out at the start, the state through the work program-expenditure obligation system is in fact aiming to subsidise exploration cost, that is, if one compares it to those allocation systems which demand "up front" payments before area allocations, such as the "auction" method. The non-diversion of capital and payments at the start is really a postponement of their capture to the time when the venture proves profitable. In order to recoup this investment subsidy together with a share of the

economic rent, it is necessary to have a functioning taxation of income and profit and an inlet for state participation in the venture. It is indeed questionable whether Trinidad has properly designed receptacles for benefiting from its allocations. In the first place, the newly enacted Petroleum Taxes (Amendment) Act, 1981 offers generous allowances for re-stimulating exploration and production activity in the industry. For example, the exploration allowance of 150% of the cost of drilling exploration wells to be deducted from gross income presents a situation where the state is meeting part of the exploration cost. This obviously is a double subsidisation of the same efforts, that is, exploration efforts by the contractor. The original intention of not receiving "up front" payments in cash was to re-channel such money into a work and exploration program, and by now giving an exploration allowance, the state is in fact providing a double subsidy. Hence, the state is increasing its subsidy on exploration and consequently diminishing its prospective economic rent income. Secondly, the recouping of the economic rent should not simply be left to the taxation system but should be accompanied by a participation policy. A formula wwhich allows a definite state interest to be retained upon idscovery offers both an increased "take" for the state and the benefit of a venture which is successful. The "carried interest" participation with no state financing for previously undertaken work, as defined in the 1973 Competitive Bidding Order, is a good

subsidary system for capturing economic rent without increasing taxation. However, in Trinidad, the state has failed to both capitalise on this form of rent collection and also to benefit from the experience gathered in mutual participation since the 1973 offer did not make a "carried interest" compulsory in production sharing contracts. The 1979 offer also had no carried interest option.

A flaw which is evident in the present system is in the area of the signature bonuses offered. In soliciting this type of payment the state can only be thinking of capturing some economic rent at the start of the contract which gives it an affinity to the auction system. Although the general policy seems to be subsidisation of exploration rather than the initial collection of rent, the signature bonus can in some cases be an awkward means to capture rent for it seeks a payment even before exploration begins and so can operate as a disincentive in the development of fields showing marginal prospects. This payment may not be necessary in the case of Trinidad which does not have a cash problem. It is, however, a device which can be used if an area has good prospects. As a suggestion, the signature bonus should be defined as a certain minimum so as to invite offers only above that sum, in this way it can create more competition in good prospect areas.

Therefore, one can say that a better framework system could be devised for allowing the state an opportunity to have a more meaningful "take" of the venture it

originally sought to subsidise. Given some of the recommendations made, it can be reshaped into a more vibrant machinery for achieving the optimum from the dollar investments made by the contractor. As a system, it can be considered as appropriate for use in realising the hydrocarbon resources of the state. However, given a more refined structure the state would stand a better chance to benefit and receive better returns on its investment. Indications are, however, that resort may be made to a system of direct negotiation if the geological prospects are not as optimistic as in the earlier allocations of acreage.

B. LEGAL REGIME GOVERNING PETROLEUM OPERATIONS

1. Fundamental Policy Issues

In the last three decades a proliferation of developing countries have attained political independence with the resultant expectation that economic independence would eventually follow. Unfortunately, there has not been an accompanying reassessment of the economic and monetary underpinnings in the world economic order and consequently a more prolonged period of "dependent underdevelopment" has ensued for these newly independent nations. It is equally illusory to think that one could promulgate or decree such rearrangement though cognisance can be taken of the plight of the undertaking and the rights and responsibilities of

the concerned parties.[41] Consequently, countries are faced with a situation where the transfer of technology has to take place within a framework where there is wide disparity of interest between the countries concerned and the rules of the game are disproportionately biased in favour of those countries possessing the sought after technological skills. Nevertheless, these development skills are needed and they must be obtained.

In the petroleum industry, which is a high technology operation, there must first be a decision that foreign private capital and technology would be used to develop the national resources and on making this decision, there should then be a restructuring of the legal regulations to allow for an expeditious production and development which is for the benefit of the national interest. In Trinidad, the promulgation of the Petroleum Act, 1969 and Petroleum Regulation, 1970 contemplated a legislative regime which would encourage foreign private investment and recognise

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41. At the multilateral level various resolutions have pronounced on these rights including, U.N. Doc. A/Res./1803, 14 Dec. 1962, Declaration 2 recognises, "The exploration, development and disposition of resources, as well as the import of foreign capital required for these purposes, should be in conformity with the rules and conditions which the peoples and nations freely consider to be necessary or desirable with regard to the authorisation, restriction or prohibition of such activities." See also, U.N. Doc. A/Res 3201, 1974, Declaration on the Establishment of a New International Economic Order, para. s.1, 2; U.N. Doc. A/Res/3281, 12 Dec. 1974, Charter of Economic Rights and Duties of States.

the interest of oil companies already operating and those which proposed to operate in the country.[42] Foreign private investment oil companies were seen as the vehicles for the transportation of technology, and the providers of large amount of risk capital. This operated to prevent the diversion of large portions of finance which could be more securely channelled to other sectors of the economy.

After recognising the need for foreign technology one then has to examine the interest and expectations of the state and those of the foreign contractor in order to fashion a suitable framework within which both interests could co-exist in an atmosphere of mutual confidence. This confidence must exist in order to make sancrosanct the terms agreed upon. The agreement itself should

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42. The Minister of Industry, Commerce and Petroleum in the sitting for the second reading of the Draft Petroleum Bill recognised that:
"Changes were made in the Government's policy in petroleum matters following extensive discussions with the oil companies operating in Trinidad and Tobago, and the receipt of comments from local as well as foreign companies which may be interested in investing in the offshore areas in Trinidad and Tobago", Hansard Parliamentary Debates, House of Representatives, Vol. 12, 1969-70, Column 1090, 16 Dec. 1969.
Also, the Minister of Energy and Energy Based Industries in the second reading of "An Act to Amend the Petroleum Taxes Act, 1974," Min. of Energy (Mimeo), p. 5, outlined two "negative effects" which the Act was intended to remedy, these were:
"(1) Prevention of future investments, in particular exploration activity.
(2) Prospective investors may be inhibited in respect of introducing new capital to the country."

retain a flexibility so as to make resilient the terms and obligations "which had to continue in effect long after the negotiators of the agreement have passed from the scene ... and to preserve those principles in future circumstances."[43] This is especially important since the interests are so different, and the foreign investor is concerned about a security of investment, a fair rate of return on capital invested and a respect and sanctity for the agreements. State interest, in a country such as Trinidad which already has an enhanced financial standing, is the maximum ultimate recovery and development of resources in addition to a gradual transfer of technology allowing for an indigenous management cadre to assume control of operations. The petroleum laws and contracts are tested against this background but are also intended to allow the interest of both parties to flourish. It also controls and regulates performance standards and obligations so that they are exercised in a manner which allows the venture to be successful and encouraging.[44]

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43. See, U.N. Doc. E/CN.11/1052, p. 4, Col. 33

44. See A.R. THOMPSON, "Sovereignty and Natural Resources - A Study of Canadia Petroleum Legislation," (1967), 1 Valpariso L.R. 284, p. 318 points that:
"The worth of the legal mechanism ... must be measured in terms of the willingness of foreign investors to participate in the petroleum industry on conditions acceptable to an informed and responsible government."

2. Legislative Overview

(a) Hybrid System

The legislative regulation of petroleum operations in Trinidad and Tobago can be classified under the "hybrid system".[45] This system combines a general legislative framework embodied in a petroleum act and regulations with a negotiated contractual document incorporating obligations agreed to between the parties. The three component parts of the system are, a general petroleum law, a negotiation process, undertaken through a competitive bidding offer and a contract which codifies the negotiated terms and gives definition to the law in specific detail. A system such as this has the beneficial value of establishing minimum standards and a basic policy approach both of which would be enunciated in the legislation and under which contractors would be invited, while there is still retained the flexibility afforded by negotiation in the bidding process.

In Trinidad, the general legislation states, inter alia, the manner of grant and form of the agreement, operator rights and the technical, work, financial and general obligations of the parties. Competitive bidding offers seek to negotiate, among other things, the actual work and expenditure obligations, production and signature

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45. Used also in Guatemala, Brazil, Peru, Jamaica, Norway, Malaysia and U.K. among others.

bonuses and some non-fiscal benefits. The Production-Sharing Contracts and Licenses which are the contracts entered into, while containing specific details of the terms agreed to between the parties, are for the most part mere restatements of the law as contained in the Petroleum Act and Regulation.[46]

This raises the issue of what approach should be taken in the statement of contractual terms and conditions and what is the true character of these terms. It is submitted that though the agreement has a commercial character, it provides a basic regulatory framework. The Petroleum

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46. For the purposes of this dissertation, the contracts used for analysis are: Trinidad and Tobago Model Production Sharing Contract, Model Clauses for Exploration and Production (Public Petroleum Rights) License over Submarine and Land Area 1970. Though actual contracts are unobtainable because of confidentiality obligations, the Chief Legal Officer, Natural Energy Corporation gave the assurance that, save figures, these agreements represent the actual ones entered into by the state. Also used are Production Sharing Contract between the Minister of Petroleum and Mines and Texaco Trinidad, Inc., Draft Copy of 17 Sept. 1974; Summary of Model Production Sharing Contract Proposed in 1974 (for two companies jointly), Petroleum Concessions Handbook, Supp. 31, New York, Barrows Publishing Co., 1970-1983, hereinafter cited as Petrol. Concessions Handbook; Production Sharing Contract between the Ministry of Energy and Mobil Exploration Trinidad Ltd., for Block S-7 (East and SouthCoast), 1 July 1980, Petrol. Concessions Handbook, Vol. 52, pp. 74-83, Model Clauses of Exploration and Production License between Minister of Petroleum and Mines and Amerada Hess, Offshore Areas 1971; Exploration and Production License between Governor General and Amoco Trinidad Oil Company, Deed No. 9051, Offshore Areas, 1970 and Model Production Sharing Contract, Deminex Oil Company, 1974 in Petroleum Legislation Series, New York, Barrows and Co., PL/CA & Caribb/BOL/CC, Supp. XIX, p. 40, (see Bibliography for explanation of abbreviations).

Regulations, 1970, serves as "model clauses" which can be used or excluded by agreement between the parties,[47] as can the terms of the "model Production Sharing Contract or such other terms and conditions as may be agreed between the Minister and the successful bidder."[48] Therefore with the consent of the parties, the regulations can be dispensed with.

This approach is not totally satisfactory, and it can be improved upon so as to be in line with international practices. There should be included in a schedule to the Regulations a complete set of model contractually drafted terms and conditions which can be used in the contract unless excluded or modified by agreement. This would establish the general terms and conditions for contracting in a legal framework, clothed in legal language, which would administratively facilitate adaptation into a contract and would also create a uniformity and consistency of approach. The terms of the Act or Regulation should not be excluded since these would represent basic government policy and such policy should not be made dispensable. Model clauses, once adapted into the contract, would become stable binding terms, though the state can retain its regulatory jurisdiction through changes in the Act or Regulation. An investor may feel more secure in knowing the law

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47. Petrol. Reg. (Competitive Bidding) Order, 1979, Sch. II, s. 6(3) states "Such provisions of the Petroleum Act, 1969 and the Petroleum Reg., 1970 as are deemed appropriate by the Minister and not specifically excluded by the Production Sharing Contract shall apply to and be incorporated into the Contract."

48. Id., s. 6(2).

and government policy, while having ample notice of the minimum terms for contracting and the actual contractual obligations he would be undertaking. This is a practice and approach used frequently nowadays in other countries.[49]

As an approach, the "hybrid system" has been highly recommended as a negotiation technique for it enables the government to stand with all its basic policies already binding while allowing for a relaxation of these obligations in return for reciprocal advantages.[50] Also, from the viewpoint of a developing country, it represent a clarity of approach and an organisation which shows that some thinking has already been done.

(b) Agreement or Contractual System

Although this regime is examined separately, it is really the second limb of the "hybrid system" and in that sense it serves to complement an existing legislative

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49. See, for example, Venezuela, Minimum Terms for Service Contracts, 23 Mar. 1968, PL/SA/BOL/CC, Supp. XXA-0; Guatemala, Resolution of Council of Ministers, 19 May, 1980, under power of Petroleum Law Decree 96-75, Art. 3, PL/BOL/CC, Supp. XXXVIII, pp. 43-61; Peru, Decree Law 22774, 6 Dec., 1979, General Basis for Petroleum Contracts of Operations of Exploration and/or Exploitation of Hydrocarbons, PL/SA/BOL/CC, Supp. LIX, pp. 73- 90; Burma, General Terms and and Conditions of Offshore Oil and Gas Bids, 1973, PL/Asia and Aust., Supp. XXXIX, A-0-A10 and U.K., Model Clauses in Petroleum (Production) Regulation, 1976, Sch. 5, 7, 8 and Submarine Pipeline Act, 1975, Sch. 2, Part. II.

framework. In Trinidad, one could find a "licensed operator" working under a producting sharing contract or an exploration and production license. Originally, licenses alone were issued whereby a contractor had no prescribed work program and paid taxes under the general fiscal laws. In 1973, when there was a competitive bidding offer, licenses were the main instruments offered but companies were invited to make proposals based upon production sharing contracts. In 1974, the P.S.C. were actually offered through an amendment to the law, allowing their use in lieu of licenses for petroleum exploration, production and disposition.[51]

The new P.S.C. were based on the Peruvian model which meant that the contractor bears all the risks of exploration, development and production cost. In the event of a commercial discovery, he is reimbursed by a designated portion of the oil given at the "fiscalisation point" where title is acquired. The state retains a portion of the oil equivalent to the taxes owed by the contractor and also the

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50. K. HOSSAIN, Law and Policy in Petroleum Development, London, Frances Pinter, 1979, p. 107 notes:
"The hybrid system by setting minimum standards and conditions, not only provides a measure of protection for government negotiators from pressure and inducements of the companies to concede to them more favourable than the "minimum", but also strengthens the government's negotiating position. The government starts off with the advantage that the company must accept the statutory minimum."

51. Petrol. (Amendment) Act, 1974, s. 6.

remainder after the contractor has his designated share. Marketing of oil is undertaken separately though the contractor may be required to act as a sales agent for the state's share and retains a right of first refusal in sales of the state's share. The state, in return for the right to search for and get oil given to the contractor, requires inter alia, that the contractor abides by annual work programs and expenditure obligations in addition to fixed bonus payments and other non-fiscal obligations. The overall effect of such an agreement is that a royalty system is created with the owner of the resources becoming the legal recipient of fixed percentages of total production in the event of a commercial find.

Due to the multi-faceted nature of petroleum operations it is customary to give rights over an area in a tiered fashion from reconnaissance permits, to exploration licenses to then to production contracts. In the case of Trinidad, this does not really obtain in practice. There is no need for a reconnaissance period since the government is well equipped with seismic and other information undertaken at this stage. However, the law recognises an exploration license as granting a non-exclusive right to search for petroleum and to provide the state with information gained, thus allowing the state to obtain information on areas for which it has little or no information. In practice, virtually all the marine and land acreages allocated were under agreements which allowed its holder to have an

exclusive right to search for, drill and obtain petroleum. Consequently, although a two-tiered system is recognised, there is in fact an exclusive outright grant of all rights at the start of operations rather than a tied conditional grant over a period of time.

Such an approach can be explained by the faith placed in the screening and selection of contractors as conducted under the bidding system and the checks and approval system built into the actual contractual arrangement. In reality, the granted contracts do retain the element of a contingent interest as exists under a tiered system because rights are still held conditionally upon the fulfillment of undertaken obligations. So, for example, what initially appeared to be an outright grant at the start can be reduced to a six-year exploration privilege, since the contract is automatically terminated if there is no commercial discovery. Similarly, the non-fulfillment of expenditure or work obligations can prematurely curtail operations and cause a reallocation of the licensed area after the third year of the agreement.

(c) Nature of Rights

Legal rights are always given by one body and conferred upon another. The state owns its resources which means that an authorisation has to be issued to anyone who wishes to undertake petroleum operations and contracts can

be negotiated only with the owners, who have authority for the disposal, exploration, development and exploitation of the resource. A legal relationship in contractual form is created, in order to transfer those privileges which the state possesses, while laws and regulations serve to supplement and regulate the grant itself. The contract may be more correctly viewed as giving 'administratively granted exemptions from legislative prohibitions" which explains why it is not exclusively commercial in nature and the state views its role as both proprietor and legislator.[52] This raises the interesting question of whether the state possesses a legitimate right to unilaterally alter the obligations undertaken in the contract, if no express reservation has been made of such a power. In the case of Trinidad, the government can make a legitimate derogation from contractual obligations, in the exercise of its sovereign right to legislate for the "peace, order and good

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52. See R.J. HARRISON, "The Legal Character of Petroleum Licenses", (1980) 58 Can. Bar Rev. 483, p. 484 where the writer observed
"In its capacity as proprietor, it can convey interests in petroleum resources by contract, thereby giving rise to contractual rights, with concomitant,

government" of the country and providing all equities attached to confiscated rights are satisfied. As a result, contractors usually seek assurances that certain things such as taxation rates or the government-company share in production sharing contracts would remain frozen[53] or alternatively argue the sanctity of contract in the event of a threatened or actual breach.[54]

It is obviously not a good practice for a state to give an assurance against legislative intrusions into the contract,[55] without making express reservation for periodic revision and renegotiation in the event of changed circumstances. It is understandable that an investor would want guarantees which would build confidence in the local laws and contractual commitments. Therefore, it is necessary to strike a balance between the sovereign right of a state to legislate in its own interest and its duty to observe terms

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53. See K. HOSSAIN, Loc. cit., supra, note 50, at p. 105, footnote 13 where it is stated that companies operating in Trinidad and Tobago sought this assurance. The information was obtained from an interview with "a representative of the Government."

54. A dispute arose between the Government and the Tesoro Petroleum Company over the introduction of a "reference price" as opposed to a "realised price" introduced by the Petroleum Taxes Act, 1974. Tesoro argued successfully that there had occurred a breach of contract and an illegal interference with contractual rights. See "Government and Tesoro in Land Row", Trinidad Express Newspaper, 8 June 1975.

55. See Iranian Committee Report, op. cit., supra, note 5, p. 71 where it recommends regarding the production sharing contracts at that time, "The contract, inter alia, provides that in case there is inconsistency between the Act or Regulation and this contract, the provisions of the said Act or Regulation shall to the extent of such inconsistency be of no effect in respect of the provisions of this contract. It is strongly recommended that this clause be completely deleted."

agreed to and consecrated in a contract by recognising that in the event of certain defined circumstances, a revision would take place which is satisfactory to both interests. It is a healthy and honest approach which recognises the nature of the relationship.

3. Legal and Administrative Framework

(a) General Nature of the Contract

In the Production Sharing Contract one can identify two categories of rights, those purely legal rights and obligations which are to be undertaken by each party and certain administrative rights which deal with the procedural and regulatory requirements associated with the legal rights. Essentially, one set of rights is more substantive while the other is more procedural in nature.

It is proposed to examine both categories under two different regimes for regulating petroleum operations, one legal and the other administrative. In looking at the legal rights it is evident that these are concerned with such matters as the actual grant under the contract to the contractor, the obligation to refine and to build a refinery, marketing of the state's share of petroleum and the standard of workmanship to be carried out. The state maintains powers of taxation and a right to predesignated shares of petroleum, but these arise only after the exploration period.

In the administrative regime, since the rights are more regulatory in nature one is concerned with approvals, notices, submission of information and decision-making in work programs, expenditure obligation and development of commercial discoveries. An examination of these would look into the extent of state involvement and its adequacy in reaching or achieving the government policy and objective.

(b) The Legal Framework of the Contract

It is intended in this part to show the rights and obligations of the state and the contractor, as they exist in the contract. It is also proposed to examine their working and adequacy for the purpose of developing the local industry and their usefulness in creating a meaningful legal structure.

(i) Rights of the Contractor

The Production Sharing Contract makes a two-fold grant of rights to the contractor, substantive rights and ancillary rights. The substantive rights are those concerned with the actual obtaining and bringing to the surface of petroleum in the licensed area. The contract's wording states that it

> "grants to the contractor exclusive license in respect of the contract area to search for, drill and get petroleum in accordance

> with the provisions herein contained but does not confer any ownership rights of the petroleum in strata ...".56

The ancillary rights, which are prescribed by law, allow contracts to include the right "to exercise all ancillary rights and rights in accordance with the law."[57]

The right to "search for, drill and get" petroleum would include rights associated with the exploration, development and exploitation of resources. Hence the contractor obtains an exclusive right to conduct such operations as are necessary for bringing petroleum to the surface at which point a designated share of production is given to him. In terms of the actual grant, the right to search would involve the carrying out of geological and geophysical explorations in order to identify those structures, in a basin, where hydrocarbon deposits may have been captured and where drilling sites could be stationed. The right to drill means that test drilling is allowed in order to verify the presence of oil deposits while the right to get arises when commercial wells are established to bring the petroleum to the surface and which includes drilling

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56. Model P.S.C., s. 2:1; Petrol. Reg., 1970, ss. 31, 32; Petrol. Act, 1979, s. 15; in the case of an Exploration and Production LIcense the grant is the same, see Amoco Exploration and Production License, No. 9051 of 1970, s. 10.

57. Model P.S.C., s. 15(2)(c), while the actual rights are enunciated in Petrol. Act, 1969, ss. 25-28 and Petroleum Legislations, ss. 31-39.

and the using of secondary recovery methods which are contractually authorised:[58]

> "The contractor shall be entitled to use associated natural gas produced in the Contract Area for his petroleum operations hereunder or to effectuate the recovery of petroleum by secondary oil recovery operations including repressuring and recycling."

The grant then, is a right to work and obtain the named resources but not one which "shall be taken to confer ownership of any petroleum in strata or to confer any other rights in land within the licensed area".[59] Actual title to the petroleum does not pass while "in strata" but only at the designated delivery point.[60]

In order for ancillary rights to be confered upon the contractor they must be considered "necessary or reasonably incidental" to operations. This makes their granting and exercise subject to administrative discretion which means that in addition to abiding by the regulations for their use they have to be approved by the Minister, department or statutory board responsible. Rights of this type are granted so that the petroleum operations could be "properly and conveniently carried out" and include, inter

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58. Model P.S.C., s. 9:3.

59. Petrol. Act, 1969, s. 15.

60. This point is the "Fiscalisation Point" which is "the outlet flange at the terminal or other facility where the Petroleum is measured for delivery", Model P.S.C., s. 9:1 when read with s. 1:(2)(9).

alia, the right to obtain and dispose of water, to fence the contracted area, to use and occupy the surface for exploration, drilling, erection, installation or construction for petroleum operations and to use port, harbour and pier facilities.[61] There is also a right to ingress and egress from the contracted area.

When read with the substantive rights, ancillary rights are necessary in order to have an unhampered use of the contracted area in the undertakings for which it has been leased.

(ii) Obligations of the Contractor

The contractor is obliged to furnish all the necessary technical, financial, material supplies, equipment and personnel for undertaking the petroleum operations up to the fiscalisation point. Additionally, he must prepare and execute the work programme, meet the commitments of an expenditure obligation for the contracted area, provide financial guarantees for such sums, and prepare and furnish appropriate and proper records and data of all operations.

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61. Petrol. Act, 1969, s. 26(2). S. 26(3) confers further rights which include "a right to enter upon land and to sink bore holes therein for the purpose of searching for and getting petroleum, and a right to use and occupy land for the erection of such buildings, the laying and maintenance of such pipes, and the construction of such works as may be required for the purpose of searching and boring for and getting, carrying away and processing petroleum."

As with all agreements of this nature there are also fiscal obligations to pay certain signature and production bonuses and to be amenable to the taxation laws of the state. Lastly, one obligation which attaches itself to all other obligations owed to the state is that all operations must be carried out in accordance with sound petroleum industry practice which serves as an overriding duty on the contractor.

Since these obligations have been the subject of discussion earlier or would be undertaken later on in this chapter, only certain areas of operation will be considered at this point. These are marketing, refining and the duty to act according to good oil field practice, which is a duty owed to the state. The obligations associated with refining do not expressly arise under the contract itself but must be discussed in order to provide a better understanding of the right to disposal of production and the obligations which arise when production attains the 100,000 barrels per day mark.

(1) Marketing and Disposal of Production

It has been the policy of the state in inviting bidders under the competitive bidding procedure to attract companies "with available markets for the disposal of production" and as such these companies provide an export-oriented multinational framework within which crude oil and

refined products have existing international marketing outlets. Such outlets are important since the contractor "shall, if requested by Government, undertake to market Government's share of petroleum".[62]

Since local sales account for less than 10% of petroleum and refined products and the state has limited international marketing capabilities it is heavily dependent on Texaco and Amoco for international sales, the U.S.A. being the main recipient. Though the National Petroleum Marketing Co. controls local sales, TRINTOC, the state oil company has only residual international and regional markets inherited from the Shell Trinidad Ltd. which was nationalised in 1974.

Under the P.S.C. the entire production is divided into three categories of shares, A, B, and C. The contractor is entitled to share A, the state to shares B and C. Share A is a fixed percentage of total production[63] while share B represents taxes due by the contractor to the state[64] with share C being the remaining percentage of the

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62. Model P.S.C., s. 9:4.

63. In the Mobil P.S.C. 1980 the entitlements to petroleum in kind were:

Crude	Minister	Contractor
For the first 50,000 bbls/day	60	40
For 50,000-10,000 bbls/day	65	35
Over 100,000 bbls/day	70	30

It should be pointed out that Gov't retains a minimum of a 60% share of petroleum in all contracts.

64. Though under the Petrol. Taxes Act, 1981 this is now changed, previously share B represented all "Petroleum Profits Tax, Unemployment Levy and any other taxes or (contd.)

production. Each party is then entitled to "take in kind and separately dispose of its share of production" though government retained the preferential right to purchase share A if its share was "insufficient to satisfy domestic consumption or local industries". Each party is thus responsible for its own marketing arrangement. However, a contractor can be requested to be a sales agent for the state's share, while the contractor's right to dispose of its share can be preempted if local industry or consumption so demands. This can be a potentially useful clause in the case of Trinidad where there is a growing demand for petroleum and refined products with increased economic activity.

A contractor, on the other hand, retains the same type of lien on the state's share for he too has a "preferential right to buy the petroleum of the state in the event of the state electing to sell to a third party for the purpose of export."[65] This is an attractive clause to a multinational company since sources of crude oil are seen as feeders for their production, refining and retail outlets. In reality, the state relies heavily on the multinational network to market its petroleum and so remains vulnerable to changes in the international market.

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impositions whatsoever measured upon income or profits which the contractor in accordance with law must pay to Government".

65. Model P.S.C., s. 9:5.

What can be suggested at this point, in view of the fluctuations in the international market, particularly in the U.S. markets, is that the state seeks to establish a firm grip in the growing Caribbean regional outlets. The right to use a contractor as a sales agent is a convenient tool, especially in cases of oversupply. However, in servicing the markets supplied by the contractor, the state has not had an opportunity to diversify its processing and has remained a producer of primary products such as fuel oil. It has also remained vulnerable to market changes. A regional marketing outlet would allow a supply of a variety of products since it would be a "captive" market and also see secured buyers.[66] In order to assist with such an undertaking, contractors should be requested to train local personnel in their international marketing division at home and abroad so as to equip the country with the requisite manpower should a progressive regionalisation of marketing outlets be undertaken. Bilateral and multilateral sales agreements would also be more available under the existing common market structure.

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66. In the Latin American region, such regional co-operation in marketing and distribution has been tried with the formation of Asistencia Reciproca Petrolera Estatal Latinoamericana (A.R.P.E.L.) between Uruguay, Venezuala, Ecuador, Chile, Brazil, Peru, Bolivia and Argentina. See "Co-operation Among Developing Countries in Oil Marketing and Distribution" by M. Alberto Giannetti, U.N. Doc. ESA/NRET/AC.10/8.

(2) Refining

Trinidad was developed and is known internationally as a centre with an export refinery of intermediate refining capacity. Its development can be attributed to the fact that it was strategically located on the route of important sources of crude and lay in close proximity to major markets. There are two refineries, Texaco (355,000 b.o.p.d.) and the national oil company, TRINTOC (100,000 b.o.p.d.) with a total throughput capacity of 455,000 b.o.p.d. Though these refineries have never operated at full capacity, they are presently being run at less than one-half of full potential with foreign crude oil providing more than two-thirds of the input.[67] The products which are obtained are varied but at the primary distillation level the main output is residual fuel oil, which is used in industry and for large scale electrical generators. This accounts for more than one-half of the production while other refined products include kerosene, dieseline, aviation fuel, lubricants and petrochemicals provide the remainder.

In looking at the obligations of the contractor which arise under the law rather than the contract, one can identify two duties which can prove particularly

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67. Imported crude comes from Saudi Arabia, Indonesia, Iran, Angola and Algeria largely through processing agreements of Texaco affiliate companies.

onerous on the contractor. First, though there is no absolute duty to refine locally produced crude in national refineries, the contractor "may be required to deliver his production to refineries in Trinidad"[68] which can be "up to one hundred percent of the crude oil produced by him, if the refineries in Trinidad and Tobago have available refining capacity."[69] This obligation if exercised, would seriously interfere with the contractor's rights "to seperately dispose of its share of production" and also the primary right to "export all petroleum...won, saved or manufactured from the licensed area and to sell the same."[70] However, such action can find support in the overriding obligation of contractors to act in the "right and interest" of the country or the national interest. It is foreseeable that they can be made to refine a share of their locally produced crude in the national refineries rather than allowing further decline in refinery throughput which dropped 45% since 1973 to a mere 163,000 b.o.p.d. in 1980. The ironical situation of local crude being exported while foreign crude is imported should not, it is submitted, continue to exist.[71] In the current market, export sales have dropped just under

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68. Petrol. Reg., 1970, s. 53(1)

69. Id., s. 54(1).

70. Id., s. 32.

71. In New Zealand, the government can direct that processing and refining be done there, while in Gabon, 50% of oil must be refined locally.

one-half over the last ten years and over recent years residual fuel oil has been quickly losing its U.S. markets due to their internal policies. A rethinking should take place which allows a new approach whereby the geographically cosest supply points are serviced. This would mean the activation of Caribbean and Latin American markets and with their reliance on middle rather than primary distillates there should be a revised or new petroleum refining agreement which specifies the products to be manufactured. In this event, the contractor may be asked to service markets in the Caribbean area and to produce products required there, on the ground that this is in the national interest.

Another onerous obligation placed on the contractor concerns the erection of a local refinery when a contractor's aggregate average daily production amounts to 100,000 b.o.p.d.[72] The obligation is to build a refinery and put it into efficient working order within three years of the site being approved. This is quite an expensive obligation and perhaps superfluous in a country which is already well served in this sector. This is perhaps the reason why, although Amoco Oil Co. has consistently produced over 100,000 b.o.p.d. since 1975, it has not been called upon to satisfy this requirement. However,

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72. Petrol. Reg., 1970, s. 51, or if it amounts to 50, 000 with proven reserves capable fo supporting an average daily production of 100,000 for seven and one-half years.

should the state call upon a petroleum company to satisfy this requirement it can prove a serious drain of corporate profit. It would also be an important factor in determining the profitability of future development.

(3) Standard of Workmanship

There is a general obligation on a contractor to carry out his operations in accordance with "sound petroleum industry practice" and a particular obligation in the case of technical matters, to act "with good petroleum industry practice and in particular sound technical and engineering principles."[73] These concepts cannot readily be relied upon to regulate the undertakings of the contractor since they are not properly defined and industry practice remains nebulous and unclear or firmly rooted in American standard industry practice. If a particular practice is to be used as a standard practice in the contract, it would probably first have to be approved of by both contracting parties. The standard practice does suggest that the contractor is obliged to abide by a reasonable standard and to employ those methods and practices which are usually or have been practiced in similar type operations and to refrain from using those which are not usually

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73. See Petrol. Reg., 1970, ss. 43(E), 42(2)(b) as included in the P.S.C. by s. 15(2)(b).

used. In any event, the contractor may seem obliged to use a particular practice which is expressly stated in the agreement. For this purpose an injunction can be obtained to prohibit a contractor from acting contrary to the particulars of his agreement, such as refraining from mining those minerals not mentioned in the lease, interfering with the support of the surface in land areas or ejecting effluvium which seriously pollutes the marine areas. On the other hand, it seems unlikely that an order for specific performance can be obtained simply to compel the contractor to act reasonably.

The task of enforcing a general obligation to act according to good oilfield practice and sound engineering principles is made even more difficult in the absence of a defined conservation, pollution and safety standard or a properly formulated national petroleum policy. Such enunciation in a single document could adequately represent the national interest which is to be protected. A further limitation of such a clause is also apparent when one considers that all undertakings are defined in terms of an expenditure obligation. An oil company would be unwilling to spend more than it has budgeted, especially on such costly fittings as pollution control devices while conservation rates demand a slower extraction of petroleum deposits, which would mean a slower pay out period for the company. In this area, a right remains valueless if it cannot be enforced.

(iii) Rights of the State

Under the terms of the contract, the state is essentially a passive participant until the discovery of a commercial reservoir when its resultant right to obtain a share of production and to tax the contractor arises. Before this point, its rights are largely administrative in nature and are concerned with supervision, notices and approvals of the contractor's operations. The right to have a submission of information from the contractor, concerning the exploration period and operations generally, remains one of its more important rights in the carrying out of its monitoring and reviewing tasks.

The state also retains rights, inter alia, to terminate the agreement for stated reasons, to impose "minimum payments, rents, royalty, petroleum impost, corporation tax and other payments", to be consulted in the preparation of scholarships and training programmes and to give orders and directions to the contractor in certain stated matters. Two rights which the state has and which deserve special mention at this point, are the right to be indemnified and the right to all equipment in the termination of operation.

(1) The Right to Indemnity

The contractor has responsibility for all liability arising from the exercise of any rights granted over the

contract area except, of course, if such liability arises because of the state's negligence or default. The state must be indemnified "at all times against action, claim or demand of whatsoever nature" which arises from a third party suit.[74] In addition, the contractor is given the responsibility towards claimants "to pay reasonable compensation for any loss, damage or injury which may be caused by him, or by his agent or servants".[75] Such an all-embracing obligation would give the state a right to be protected from liability which may arise from such factors as pollution, explosions, chemical damage, disturbances to water supplies and ecological disturbances among others. Since the state is to be indemnified, it would probably include payment of legal fees which it has had to meet in providing a defence in such matters and also all compensation which it has had to pay to claimants. It would appear that such indemnity only arises when liability has been established by law.

(2) Right to Equipment

Upon the termination of the contract, the state has a right to have delivered to it, "free of charge, in good order, repair and condition," such equipment as is included

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74. Model P.S.C., s. 13(1), Petrol. Reg., 1970, s. 42(J).

75. Petrol. Reg., 1970, s. 42(1).

in,

> "all installation, buildings, works, pipelines and other articles used in petroleum operations in the Contract Area together with all casing, engines, tubings and fixtures below surface level."[76]

The actual equipment to which the state obtains title could be more properly defined. However, such an acquisition has its pros and its cons. It can operate unfairly to the contractor should the contract end prematurely, in which case the state stands to benefit from its equipment purchases. This would, nevertheless, be the exception, since the duration of the contract usually exceeds the life of the field. The acquisition can be burdensome in that the state can be stuck with environmental hazards which are very costly to remove or dismantle and which have no resale value. The state could be well advised, that rather than making it obligatory for the title to equipment to pass upon termination, to have a clause which gives an option to have them removed at the end of the contract.

The state's right to equipment may be viewed suspiciously by the contractor. This may be so since a premature transfer of equipment to the state would mean that the Contractor would not have recouped his expenses incurred. The threat of such a clause may well encourage equipment to be leased from third parties or affiliates which, while depriving the state of ownership upon termination,[77] may be

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76. Model P.S.C., s. 14(1).

a more expensive addition to the expenditure obligation budget, thereby redirecting much needed exploration and development money. There is evidence that the local oil companies are increasingly relying on private foreign equipment contractors and "turnkey" type installations, where all that is needed is provided.

(c) The Administrative Framework of the Contract

Introduction

In taking an overview of the present arrangements, it can be said that the state has not actually become involved in the management and control of operations, which would have allowed the "inner workings" of petroleum operations to be learned, but has rather become a passive repository of information and an approval agency for the contractor. The declared objective of the state in using the P.S.C. was to become "more directly involved in the physical resources of the country"[78] instead of being a mere collector of tax. It is doubtful whether the system as it exists in its present form can ever achieve this objective. Presently, the state is deprived of working jointly with the contractor in any meaningful manner which would allow a learning of the "technical and managerial skills gained

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78. Annual Admin. Report, 1974, loc. cit., supra, note 22, p. 18.

through constant exposure."[79] A system which is built upon approvals, notices and report forwarding does not have the potential for participation and management which is mandatory in order to acquire the operational skills necessary for assuming control of the industry. As an informed observer pointed out,

> "It is questionable, however, whether nationals operating under the management framework under P.S.C.'s which is built around 'approvals' being given to programmes prepared by the contractor, have greater opportunities to learn the inner workings of the companies than under a joint management framework, where the nationals are involved in the preparation of the programmes."

If the state is to achieve a role which allows for more involvement and control then it must combine a managerial with a regulatory role. The managerial role denotes an involvement at the decision-making level which allows a say in the actual running of operations and the planning of future activities. Regulatory duties would include the monitoring and supervision of operations in order to secure their performance for the national interest and in accordance with law. In its present role, the state has been

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79. R. FABRIKANT, "Production Sharing Contract in the Indonesian Petroleum Industry," (1975) 16 Harvard Int. Law J. 303, p. 317.

80. K. HOSSAIN, Law and Policy in Petroleum Development, loc. cit., supra, note 50, p. 143.

exercising a largely regulatory role through inspections, consultations, approvals, reporting, time schedules for implementation and standards for performance, all of which are detached from actual participation for they are essentially concerned with operations only after policy decisions have been made by the contractor. Hence, in this form the P.S.C., which was intended to create more direct involvement, has not significantly changed the state's role in management from the exploration and production licences, which they were intended to replace.

What can be suggested is a joint operating and management committee which would have a direct decisional say in all important issues. It would serve to prepare a group of nationals in the operational and managerial aspects of policy issues while allowing for the intervention of the state at critical decision-making points. Close collaboration with the contractor through a neutral committee would also serve to provide an intermediary body between the parties and a forum for preventing the contractor from undertaking policies which are not in the interest of the state.

(i) General Responsibilities of Parties

The contractor is responsible for the "management and execution" of petroleum operations which involves the exploration and exploitation of the resources. In

carrying out these undertakings, the contractor is to "consult and co-operate" with the government.[81] The state, through the Minister responsible for petroleum, has the right to "supervise the operations of the contractor" and "to observe ... the execution of petroleum operations under the contract."[82]

In carrying out his obligations, the contractor is obliged to observe two overriding duties. First the operations shall be conducted with "due diligence and act in accordance with sound petroleum industry practice" and secondly, to have regard "at all times in the conduct of operations to the public interest and to the rights and interest of Trinidad and Tobago".[83] The contractor, it would seem, by virtue of providing the financial and technical resources necessary for operations, has been entrusted with the exclusive managerial powers of the undertakings while the state has only a supervisory role. Such

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81. Model P.S.C., s. 2:2 states:
"The contractor shall have and be responsible for the management and execution of all petroleum operations and related functions contemplated hereunder for the exploration and exploitation of the petroleum resources from the contract area and, in the overall conduct of such operations, the contractor shall consult and co-operate with the Government."

82. Model P.S.C., s. 2:3. "The Minister shall have the right to supervise the operations of the contractor and shall at any time during the term of this contract, if he so elects, nominate persons to observe the contractor's execution of petroleum operations under the contract."

83. Petrol. Reg., 1970, s. 42(2(m).

a situation is not satisfactory, for it does not take account of the state as owner of the resources and its need to acquire managerial expertise with a view to reducing its dependence on the foreign contractor. Interestingly, under the previously used exploration and production licenses the contractor was also given exclusive rights for the management and execution of the petroleum operations although there was no retention by the state of a supervisory role. One finds that state participation has hardly altered in any meaningful way and those powers reserved for the state of consultation, supervision and co-operation, result in recommendations which are purely directory in nature.

The state has retained its major power through the use of the two "challenges" which are written into the contract and law. They state that the contractor must act in the "national interest" and also according to "sound petroleum industry practice." However, the usefulness of the first challenge has been watered down by the non-declaration and non-definition of a national petroleum policy. This makes it difficult to provide an interpretation of what is the national interest so as to be able to question the conduct of given operations, their execution or management. Similarly, the other challenge operates in a nebulous manner for there is no clear interpretation of its meaning or indeed a mutual agreement as to what is basic industry practice. Nevertheless, they remain grounds which are available to the state for challenging the

performance of obligations and in this sense they can at least initiate a review of particular operations.

(ii) Submission and Review of Work Obligations

On being awarded a contract, in addition to the minimum obligations undertaken in the competitive bidding offer, there is a further obligation on the contractor to prepare and submit a work programme within the first three months of signing the contract and thereafter annually. As the contract states,

> "Within ninety days after the effective date, and thereafter at least two months prior to the beginning of the contract year, the contractor shall prepare and submit for the Minister's approval a work programme and budget for the contract area setting forth the petroleum operations which the contractor proposes to carry out during the ensuing contract year." 84

The underlying obligation is such that the state itself cannot submit a work programme or budget but can only request the contractor to prepare and submit one, while the contractor cannot carry out a programme without first obtaining ministerial approval.

The work programme is part of the overall package of obligations which the contractor undertakes in order to obtain a contract area. During the exploration period, the programme would be concerned with the carrying out of

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84. Model P.S.C., s. 6:1

geological and geophysical surveys so as to determine well sites and in order to drill the minimum well obligations established by agreement. This period, which has a maximum time of six years, would see a total surrender of acreage at its end if there is no commercial discovery. In addition, a fifty percent surrender takes place after three years in any event. Hence, the contractor, in his work programme, would want to undertake a very thorough and complete exploration in order to be sure that on relinquishment there is not the chance of a "bonanza strike" should the relinquished area be reallocated. The state, in this period, is interested in a complete and rapid evaluation of the area and so the interests of both parties are practically identical. One can now look at the obligations of the parties as evident from the submission, revision and challenges to the work programme, which is the main constituent part of the contractor's obligation to the state.

As outlined above, there is an obligation only to "prepare and submit" a work programme and budget for the contract area and this would set out the main proposals the contractor wishes to carry out. Such proposals, it agreed to, can be modified from "time to time" by the contractor providing ministerial approval is given.[85] At this

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85. Model P.S.C., s. 6:2 states: "Modification of a work programme and budget may be made by the contractor from time to time during the contract year and any such modification shall promptly be presented to the Minister for his [illegible]"

point, the Minister has no power to present modifications of his own but only to approve or reject the proposed modifications of the contractor. The state has a right to propose a revision or modification of certain specific features of a work programme or budget only after an initial submission and not from time to time." Such proposals by the state must bemade within forty-five days of the submission of the work programme for approval, and the state retains no further right to revision or modification after this; the only other situation when "details of the work programme" can be amended as if the "existing circumstances" warrant it and there is mutual agreement.

In such a contract, the power to request a revision or modification by the state is the only mechanism for vetoing an unsatisfactory work programme which is presented for approval. The state cannot use a withholding of consent to achieve this purpose for consent is not to be "unreasonably withheld". The inadequacy of a "challenge by revision" is further highlighted by the short period of time, forty-five days, allowed for the presentation of a revision. Further, with the scarcity of expertise in a developing country and the difficulty of summoning an expert opinion from an independent consulting service,[86] it is questionable whether the state is able to make full use of this challenge.

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86. See K. HOSSAIN, Law and Policy in Petroleum Development, loc. cit., supra, note 50, p. 141.

Given the approval system, the state retains not only a veto over the proposals of the contractor but a potent delaying power, for by simply proposing a revision it can substantially delay the implementation of any work by the contractor. Such a delay can only be challenged if there is bad faith. The clause which authorises a revision is an important one. As such, this clause should be rephrased to permit a haltingof work only in cases of a substantial revision or modification so allowing the work programme and and budget to have approval, if the query is only minimal in nature or of a type which could be settled while work is in progress.

A further ground for challenge would be to question the "adequacy" of a proposed work programme and budget. This can be so questioned if it does not meet the "overriding obligations" of the contractor in his having to act in the national interest. In this event, there would appear to be a right to arbitration as a "dispute arising between the parties to the contract."[87] It is submitted that a right to arbitration would also arise under the same provision should the contractor not agree to a particular revision proposed by the state, under the state's right to propose revisions of the work programme.

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87. Model P.S.C., s. 17(1).

In order to alleviate some of the delay and disagreement which could arise between the parties, not only should the reasons for a revision be stated by the state but also the grounds upon which the state can base a revision, rejection or withholding of consent to the contractor's proposals. These should be adequately defined in the contract. Such openness would provide grounds for a fair hearing in the event of arbitration. It would also give notice to the contractor, of the state's expectations in a proposed work programme and budget. While these issues deal with a situation where there has been a preparation and submission of a work programme and budget. In the event of the contractor not preparing a programme and budget within ninety days of signing the contract, the Minister could have grounds for a revocation of the contract on the grounds of a "material breach" under s. 17(2)(c) of the Petroleum Act.[88]

In the previously used exploration and production License, under which some existing productive acreages are still held, there was no obligation to prepare and submit a work programme but there was an "annual expenditure obligation." This meant that there was no need to agree on the type of work to be undertaken but only on a budget which

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88. If such occurs the contractor has a right to arbitration under tion under Petrol. Act, 1969, s. 18(1). As an alternative, the Minister can decide instead of revocation to give notice to the contractor to remedy the breach and pay compensation thereof under Petrol. Act, 1969, s. 17(3).

was to be used. Hence, the state has a right to agree to both budget and work programme under the P.S.C.; however, one can only venture to make a theoretical distinction between these contracts and the licenses earlier used. This is so becouse state approval of work programmes tends to be a rubber stamping of the contractor's proposals while the actual work to be undertaken is invariably determined by the budget allocated by the company to the particular project. Given such a framework, the state does not stand to be more involved or to benefit from its rights under the contract system. A much better approach would be for a joint committee to annually formulate the work programme since at least such access would allow the State a better understanding of the "inner workings" of the petroleum operations as it evolves from exploration to exploitation. This should replace the simple approval structure which currently exists.

(iii) Determination and Development of a Commercial Discovery and Use of Sole Risk Clauses

A critical point in the life of the contract is reached when there has been discovery of a commercial reservoir and relations proceed from the exploration stage to the development and exploitation phase.[89] There then

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89. The Trinidad P.S.C. does not adequately define and distinguish between the various stages of the contrac-

has to be a determination of whether or not a "commercial discovery" has been achieved and if so, the contractor has to submit for approval a programme for development.[90] The proposal and approval are prerequisites in order to embark on a development programme. In addition, there is a further obligation on the contractor to "enter into detailed arrangements with respect to lifting of their respective shares"[91] with the Minister. This is a statement as to the amount of petroleum recovered and its distribution.

Lifting agreements are very important for they determine the rate of extraction for, should there be an indiscriminate pumping of the resources it can render unrecoverable much of the reservoir. A proper conservation policy could safeguard against such a situation but in the absence of this the state should include a clause in the agreement which calls for the reassessment and change of

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tual relations such as exploration, discovery and exploitation but rather groups all activities under the term "petroleum operations." It is suggested that there is need to properly define each stage of operation in order to establish the rights and duties of the parties associated with specific activities at particular points of the operation. See, for example, Petro Peru P.S.C. with Occidental Petrol. Corp. 1979, BOL/CC/SA/Supp. LIX, pp. 1-3.

90. Model P.S.C., s. 5:6 states:
"If a commercial discovery is achieved in the contract area the contractor shall, as soon as practicable, commence a program to exploit the above-mentioned discovery in a manner to be determined by the contractor and approved by the Minister."

91. Model P.S.C., s. 9:2.

rates of production at any time thereafter, should the state so suggest or if agreement can be reached on a "maximum efficient rate." Such an option can serve to prevent overproduction at times when prices have fallen, encourage conservation and make adjustments if necessary for economic reasons or good oilfield practice.

A very important question at this point, is how to determine a commercial discovery. In looking at the question of commercial discovery one finds some differences of approach in the various contracts entered into over a period of time. The decision on commerciality is stated in some cases to be a mutual one after considering certain stated variables,[92] a unilateral decision[93] or simply a "deemed discovery" which automatically takes place

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92. Model P.S.C., Deminex Model (For Two Companies Jointly) As Proposed by Government, 1974 in PL/BOL/CC/CA and Caribb. Vol. XIX, p. 45 defines a commercial discovery as
"the discovery of petroleum in such quantities that the production rates, reservoir performance and recoverable reserves are, in the opinion of the parties, sufficient to justify a commercial development of the discovery"
and also in P.S.C. between Minister of Energy and Energy Based Industries and Mobil Exploration Trinidad Ltd., 1st July, 1980 in Petrol. Concessions Handbook, Vol. 52, p. 74.

93. Model P.S.C. Texaco, 15 Oct. 1974, Cl. 1:4 where it is defined as:
"the discovery of petroleum in commercial quantities which Textrin decides to develop and exploit after studying the quality, density, reservoir performance and recoverable reserves of the petroleum present, the place and depth of its location, the required potential investment and prices prevailing in the world market."

after a certain period of a stated production rate.[94] If the decision is a mutual one, as is the present position, a decision would not be reached until there is a mutual agreement. It is foreseeable that difficulty in reaching an agreement would arise when the question of marginal field development has to be decided. In this situation, it would be better to have a fixed formula which allows a certain rate of return on the investment on the basis of reasonable cost, price and production rates and so allow the decision to make itself.

The determination of a commercial discovery in the case of a marginal field is one area which has given rise to dispute. In this respect one could identify three factors which would serve to discourage the development of marginal fields by the contractor: The payment of production bonuses on commercial discovery, non-adjustable production sharing divsion of discovered petroleum and the divergent interest of the respective parties.

In order for a contractor to develop a reservoir, it is important that he obtains a reasonable rate of return

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94. Exploration and Production Licence Deed No. 9051, 1970 held BY Amoco Trinidad Oil Co., Cl. 9 which states: "When exploration and borehole or well produce petroleum for 120 consecutive days or by any other means demonstrates, in the opinion of the licensee with the concurrence of Government, which concurrence shall not be unreasonably withheld, adequate producing rates, reservoir performance and recoverable reserves to justify the drilling of additional wells to the same objective and depth or formation as that from which petroleum could have been produced through the

on invested capital. It is doubtful whether this would occur, if there is the payment of a large production bonus at the start of commercial production[95] plus the giving of a fixed sixty per cent. (60%) share of the first fifty thousand barrels (50,000 b.o.p.d.) to the state, in the case of marginal fields. Payments of this nature constitute a significant drain of capital and this in turn diminishes the profitability for the contractor, which is his sole criterion in making an investment. In effect by setting a minimum non-adjustable production division of petroleum coupled with an initial production bonus payment a state is in fact creating a policy whereby certain fields would not be developed. In a country with vast amounts of productive fields the non-development of marginal fields could be a deliberate state policy, but this has never been the case in Trinidad as the vigorous secondary recovery programme would attest to. Therefore, one can forsee a divergence of interest between the state and the contractor who may be more willing to invest in cheaper sources of petroleum elsewhere. To correct this, the state must bear a larger part of the risk by devising a cost recovery scheme which would encourage the contractor to develop the marginal fields.[96] A solution which is more straightforward is

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95. In the Mobil P.S.C. (1980) this figure is 7.5 million U.S.

96. A cost-recovery production sharing contract would be one example. Another is the "Progressive Incremental Royalty" in Canada which allows for an automatic 25% rate of return.

the "sole risk" clause. This allows any discovered reservoir which the contractor is unwilling to develop to be turned over to the state which then develops it at its own expense either with the assistance of a contractor or that of another state though a technical assistance agreement.

The "sole risk" operates as a disclaimer of responsibility by the contractor, for he is not obliged to develop a reservoir which he does not consider to be a commercially viable undertaking. In this situation, however, there is allowed a continuity of contractual relations between the parties without a dispute. This clause is not new and has been used in petroleum agreements in other jurisdiscitons including Peru,[97] Egypt,[98] and Chad, where the contractor developed the discovery on behalf of the state for a guranteed rate of return.[99] A state may also be able to have a more developed country undertake the

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97. See General Petroleum Law as contained in Decree Law 22774, 6 Dec. 1979, Cl. 5:8.

98. See Model Concession Agreement for Petroleum Exploration and Exploitation, May 1980, Art. III(c)

99. See U.N. Doc. ST/CTC/29, p. 71 (1980), Chad-CONOCO Agreement, 23 July, 1980, Art. 9 which states:
> "In the event the oil company decides not to develop a discovery because it is considered uneconomic, the state shall have the right to require the company to develop the discovery on behalf of the state on the condition that the state provide all the financing for the development and exploitation cost as well as assure the company a profit margin equal to 5% of the ex-field value of the crude free of all burden."

venture under a technical assistance agreement[100] or a state oil company.[101]

In the present Trinidad P.S.C. there are no "sole risk" clauses which means that if the contractor does not agree to develop a reservoir, there can be no further activity in that area. As outlined earlier, one way of avoiding such reluctance to develop, especially in the case of marginal fields, is to either provide incentives which would allow cost recovery or devise a mathematical formula which interprets the potential of a field in terms of the recovery of the necessary investment and an agreed or reasonable rate of return. Such a formula would provide a "deemed discovery", not one which has to be decided by relying on the discretion of the parties for this could be the source of conflicting views. In addition, it would calculate and quantify economic viability which would in turn reduce the discrepancies created by two different methods of calculation. This approach has been successfully used in Venezuela and Angola.[102]

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100. E.g., B.N.O.C. is assisting Malaysia, Petro Canada-Jamaica, Norway-Benin.

101. Such as Petrobras of Brazil, PEMEX of Mexico, the Oil and Natural Gas Commission of India or SONATRACH of Algeria all of which have good technological capabilities in petroleum operations.

102. For Venezuela, see Service Contracts - Minimum Basis as Proposed by Venezuela Petroleum Corporation (C.V.P.) 13 Mar. 1968, Cl. 7. For Angola, see Summary of Petroleum Exploration and Production Sharing Agreement, 4 Jan. 1980, Between SONANGOL and (contd.)

(iv) Expenditure Obligation

There is an obligation to spend a minimum sum of money on the minimum work obligations and the annually agreed work programme, over the first three years. This is called the "expenditure obligation".[103] As shown earlier, each year a budget is presented for approval, which is an expenditure account for the work to be undertaken in the annually approved work programme. At the end of a three year period, the annual budget expenditure must cumulatively add up to the expenditure obligation, as agreed between the parties. This means that a contractor has to carry out his work obligations, for the first three years, within the prescribed overall limits set by the minimum expenditure obligation and within annual budgets as agreed between the parties.[104]

The expenditure obligation is to be spent on

Texaco Int. Petrol. Co (for offshore areas), Petrol. Concessions Handbook, Supp. 46, p. 1. In the Angola system, commercial productivity is related to production rates achieved at different water depths.

103. See Petrol. Reg., 1970, s. 44; Petrol. Reg. (Competitive Bidding) Order, 1979, s. 4(2)(e).

104. In the Mobil P.S.C., 1 July 1980 for Block S.T., the "expenditure obligation" was (U.S). fifteen million for the first three years. A further (U.S). seven and one half million had to be spent over the second three year period.

"exploration operations"[105] within the contract area. It would seem that the confining of expenditure to "exploration operations" would appear to be an oversight since there is not a clear demarcation of expenses on exploration as distinct from petroleum operations. This can give rise to an anomaly. It means that should there be a commercial discovery within this period although there is an obligation to "commence a programme to exploit" as soon as practicable, the contractor would still be under an obligation to spend money on exploration activities. This would substantially divert funds needed for exploitation work. The contract then, needs to have a clearer definition of the expenditure obligation associated with exploration in the event of a commercial discovery.[106]

A contractor has to show the "financial ability" to carry out its obligations and for this reason is required to deliver guarantees for the total amount of the expenditure obligations. These guarantees are in turn reduced annually by the "actual exploration expenditure".

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105. Petrol. Reg., 1970, s. 44 states:
"The licensee shall be required to spend on exploration operations during the first three years a minimum sum annually (hereinafter referred to as "the expenditure obligation") to be determined in the case of each licensee, and to be specified in the licence". See also, Model P.S.C., s. 5:7; Exploration and Production License, Amoco Trinidad Oil Co. Ltd., Deed No. 9051 of 1970, s. 43.

106. See, for example, P.S.C. between Y.P.F.B. and Tesoro Bolivia Petroleum Company, 7 Oct. 1974, Cl. 4:2:1 and 4:2:2.

Reductions are authorised only at the end of twelve month periods and upon the presentation of "all technical data obtained from surveys ... and the interpretation thereof as well as data and results from any other work performed."[107] These performance bonds are necessary in order to compel the performance of work obligations since its reduction is dependent upon the fulfillment of these responsibilities. Also the oil company at the earliest stage of its undertaking may have little or no assets in the country and such deposits can serve as a collateral during this period. In its most recent contract, the Mobil P.S.C., the state only requested fifty per cent (50%) guarantees which is perhaps in recognition of the high cost of affording such assurances.

Information which is necessary for gaining annual reductions of the expenditure obligation must be "in such detail and together with such supporting evidence as the Minister may require". Overspent sums are carried forward while a deficit, in a three year period, results in a forfeiture of one-half by which the sum has fallen short. This sytem in practice requires tremendously accurate cost verification and it is doubtful whether Trinidad has the accounting expertise to question bills and cost accounts presented to it. What can be seen from this, is the weakness of establishing obligations based on expenditure

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107. Petrol. Reg., 1970, s. 45(2).

rather than "in kind", for it is uncertain whether accurate bills and cost estimates for goods and services would always be shown. This is a well known technique called "gold plating" used by companies for inflating cost in order to increase profits.

Two approaches can be recommended for use which would allow the state a better control over the expenditure obligation and provide for more efficient monitoring of expenditure. First, the state can ask that the contractor to provide a monthly schedule of the cost for similar type operations which is being done elsewhere in both onshore and offshore operations. Included in the cost would be an inflation indexed percentage since there is continual fluctuation in these prices.[108] Secondly, stated grounds for challenging the expenditure of the contractor should be stated in the contract. Under the present structure, there is only a duty to submit requested information which means that upon submission there is a prima facie fulfillment of the obligation. There is no requirement that the Minister be satisfied with the submitted information It is suggested that the system has to include such a requirement in order to make the check more meaningful and potent. At present the submission is only a token requirement. Grounds of challenge would place the onus of proof on the

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108. For a concise account of the various heads of costs involved, see A.P.H. VAN MEURS, Modern Economics,

contractor and, given the weaker accounting position of the state, this would be a more meaningful way of checking expenditure. The actual grounds could be as follows:[109]

1. If the records are not accurate in themselves, i.e., inadequate documentation.

2. If the cost of the goods and services supplied are not in accordance with international market prices for similar type goods and services in similar transactions.

3. That the cost and services are not reasonably required for the operation.

In order to properly implement a system such as the one advocated, there would also have to be a definition of the costs associated with each stage, starting with exploration activity and later on, development and exploitation. Each stage and set of costs should be given limits and properly defined so as to allow a proper functioning of the deductions associated with each set of costs.

(v) Information Submission Requirement

The submission of information by the contractor to the state is created in order to allow the state to monitor, be informed and have access to documentation as a

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109. See generally, Egyptian Concession Agreement for Petroleum Exploration and Exploitation, May 1980, Article VII and Oil and Gas Exploration and Exploitation Contract between the Petroleum Corporation of Jamaica, Union Texas Jamaica Inc. and AGIP (Overseas) Ltd., Cl. 805 in BOL/CC/CA and Caribb., Supp. XXXVII, pp. 29-30.

means of checking on the legitimacy of operations and to protect its interest in the contract area. As such, the contractor is faced with the duty of keeping, allowing and having inspection of and furnishing certain documents. The Petroleum Regulations, 1970 create the obligation under which the contractors shall

> "at their own expense, prepare and furnish to the Minister, information, returns and data concerning their operations in such manner and detail as the Minister shall by order prescribe from time to time."[110]

In addition to the obligation to "prepare and submit" the stated information, the contractor has to allow authorised representatives of the state, during the course of inspection of operations, to make "abstracts and copies of any records, maps or other documents."[111]

The requirement to submit information is one which continues throughout the life of the contract and consists of a great deal of statistical data which is submitted in forms, prepared by the state, which allows the soliciting

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110. Petrol. Reg., 1970, s. 81; Petrol. Act, 1969, s. 12(1) makes it compulsory for all contracts to contain a clause which requires the contractor to furnish "full information concerning his operations" and to allow for inspection of "plant operation, records and accounts."

111. Petrol. Reg., 1970, s. 42(L).

of information it needs.[112] The contractor, on his own, must also ensure that the state obtains "all important scientific and technical data and interpretations thereof resulting from the conduct of operations" together with "such original geological, geophysical, drilling, well, production and other data."[113] All information is subject to the overriding requirement of having to be submitted within a "reasonable time".

The other limb of the book-keeping requirement imposes a simpler duty to "keep in Trinidad and Tobago correct and intelligible books and accounts" concerning, inter alia, information on the disposal, export, refining and testing of petroleum.[114] Also, to keep and allow inspection of "proper records and complete books of account with respect to costs and expenses incurred under the contract".[115] This allows a checking of actual expenditure

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112. Forms cover every aspect of operations and include: Petroleum Production Report, Petroleum Production Field Analysis, Oil Production Summary Report, Field Injection Projects Report, Well Drilling Programme Report, Notice of Commencement of Drilling Report, Well Completion Report, Well Workover Programme and Report, Gathering Station Alteration Report, Fiscalisation Point Control Report, Monthly Statement of C.H.P.S. and Crude Oil Inventories, Monthly Statement of Well Workover Activity, Monthly Statement of Well Drilling Activity, Monthly Gas Report, Physical Loss Report, Accident Report, Monthly Statement of In-Process and Finished Product Inventories and Annual Manpower Report.

113. See Petrol. Reg., 1970, s. 82 and Model P.S.C., s. 12(k).

114. Petrol. Reg., 1970, s. 42(2)(e).

115. P.S.C., s. 12(c).

which can then be tallied with the general expenditure obligation as agreed.

The state is able to acquire under these provisions a large amount of information from the contractor through report forwarding and inspection of records and books which must be compulsorily kept. The data, however, is seriously biased in favour of statistical information and submission of information does not operate within a properly defined time schedule which can make the difference between useful and useless data. A most important point in the life of the contract is upon commercial discovery and here one finds the contract to be at its weakest since there is no duty on the contractor to immediately bring such a find to the attention of the state. In this respect one can make some recommendations which would significantly enhance the provisions and make information submission a more useful and potent tool in the hands of the state.

A contractor should be made to submit a quarterly statement of exploration activities and cost which gives details of the progress of operations, from the contractor's point of view, the cost of such activities and the proposed undertakings and the cost for the next quarter. Such information would allow the state to have a fair indication of the progress towards meeting work and annual expenditure obligations, without having to wait for the end of the year to get a statement. Annual consolidated statements of these reports should be presented as annual

reports which would represent the cumulative work and expenditure undertakings for an entire year. These can then be read in conjunction with statistical data and other reports and interpretation studies to give the state's information more form and substance. Progress reports of this nature would also serve to tighten the ill-defined obligation of merely having to submit information within a "reasonable time". Also, it can alert the state of the need for acceleration in activities or in the expenditure budget.

A special reporting duty should be placed upon the contractor in the event of the very important of a commercial discovery. The state should be informed immediately, if the presence of petroleum is detected and be kept continually informed of progress and developments including the provisions of drilling and testing reports. This information would allow the state to make its own determination at a very crucial time on whether a commercial reservoir exists or not. It can then request the contractor to do further work, so as to prove the capacity of the reservoir, under the obligation to develop any discovered fields "to the maximum extent consistent with good petroleum industry practice." If a sole risk clause is included, the state can require the testing of deeper horizons at its own expense but maintain a right to all petroleum which is discovered.

A further benefit to be derived from the suggested system is the following. The state in deciding upon the commerciality of a discovery, would possess original copies of reports, their interpretation and other information which would have been used by the contractor in making its decisions. In the event of a dispute as to the commerciality of a reservoir, this data could be re-evaluated by the state or an independent expert who could then pronounce on the viability of recovery. If there is a fixed rate of return formula, as suggested, then such dispute could be settled in a more straightforward statistical manner. Although there is a duty to provide to the state the interpretations of scientific and technical data, companies are sometimes unwilling to give their "derivative" reports which are prepared by the parent company. A clause should expressly spell out the need for these reports to be submitted. Also, as a means of checking the outflow of information and reports, it should be a condition precedent that before its leaving the island, a copy be made available to the state Again, all of this is being done to safeguard the interest of the state and to allow for optimum development of its resources. For this reason, one can also say that contracts should not contain a clause which disallows the state from using information it obtained from a contractor in the soliciting of new offers for relinquished or

surrendered ones.[116]

(d) Suggestion for Joint Management Participation in the Contract

In its present form, the management of petroleum operations relating to exploration and exploitation under the P.S.C. is not satisfactory and is in need of amendment, if the state is to play a more meaningful and involved role. If the state objective of learning the inner workings of petroleum operations to the extent required for eventual take over of the industry is to be achieved, then there should be more active involvement at the decisional level in addition to maintaining supervisory and regulation powers. Though one has to recognise the inherent managerial and technical limitations of a small developing country, it is possible to suggest a framework for involvement which would allow the state a medium for voicing its opinions, vetoing unsatisfactory suggestions and providing review and checks on operations.

This framework has to have the permanence and continuity of an institutional body, which allows local nationals exposure to the multi-faceted decision-making involved in petroleum operations while working jointly with representatives of the contractor. The effectiveness of a

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116. See Amoco Trinidad Ltd. Exploration and Production License, ss. 27-31, Deed No. 9051, 1970, Trinidad and Tobago.

joint management body is, in the end, dependent upon the competence and ability of the state to use it but it is worth pointing out that many other regimes have implemented them as a means of control and involvement.[117]

It is proposed that there should be established an Explorations Committee, and on the attainment of commercial production, an Operating and Supervisory Committee. This would effectively divide the regime of petroleum operations into two distinct parts, one dealing with exploration, the other with exploitation and as a result would recognise the different interest and rights at each stage. Also, in defining the duties of each committee it would be necessary to properly identify and delimit the responsibilities of the contractor as operator in order to create a proper working relationship between this body and other joint

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117. See, Bolivia, "Control Board" in Contract for Exploration and Exploitation of Oruro and La Paz Areas between Y.P.F.B. and Tesoro Petrol. Co., 7th Oct., 1974 in BOL/CC/ South America, Supp. XXXIX, p. 1, at p. 29, Cl. 9; Peru, "Supervisory Committee" in P.S.C. for Exploration and Exploitation in the Jungle (Block 1A-A) between Occidental Petrol. Co. of Peru and "Petro Peru" in BOL/CC/SA, Supp. LXIV, p. 1, p. 18, Cl. 5:8; Angola, "Exploratory Advisory Committee" and "Operating Committee" in P.S.C. between SONANGOL and Texaco International Petrol. Co., 4th Jan., 1980; Petrol. Concessions Handbook, Supp. 46, pp. 1-22; Egypt, "Exploration Advisory Committee" in Model Concession Agreement for Petrol. Exploration and Exploitation (mimeo), May 1980, Cl. IV(c); India, "Management Committee" in Proposed Exploration Contracts in India, 1981, Petroleum Tax Legislation (P.T.L.), Far East, Supp. 80, pp. 1-8; Malaysia, "Management Committee", Summary of Offshore P.S.C., 1976 PL/BOL/CC/Far East, Supp. 32, Appendix II, p. 18.

committees.

Both committees should be formed with an equal number of representatives from the state and the contractor, which would be about four, with each party liable for the expenses of its members. Meetings should be monthly with a fixed time, place and quorum with internal procedure for functioning being decided by the committee itself. A chairman, elected from the state representatives should have a deciding vote in the event of a deadlock.

The Exploration Committee, as one of its first duties, should establish a set of principles and practices which constitutes a "memorandum of understanding," on what constitutes "sound petroleum industry practice." A working document of this type could be useful throughout the life of the contract for establishing the fundamental tenets for judging the adequacy of petroleum operations undertaken. During the exploration period, the contractor should retain the right to prepare the work programe and budget since there is little likelihood that the interest of the parties would differ at this time. However, the Explorations Committee should be allowed representation at all meetings concerned with such preparation and should retain an advisory role to make recommendations and give advice on proposals. The formulated proposals would be subject to the approval of the Committee as a whole which can also suggest revisions and modifications in their review. At the implementation stage, a power should be given to the

Committee to instruct the contractor on adequate means, methods and procedures for the efficient development of the resources. Access to all necessary and required information should be allowed by law so as not to prevent a proper and adequate investigation in the performance of its duties. Essentially, the purpose of the Committee would be the evaluation of the execution of the work programme and annual budget and in so doing should be allowed the use of an independent consulting service if required. In the exercise of its duties, the Explorations Committee, like the Operating and Supervisory Committee, should be required to give reasons for its decisions and to make available the minutes and records of meetings available to the contracting parties.

The Explorations Committee should have power, after providing proper documentation, to make recommendations to the state that the annual expenditure obligations are satisfied and should be deducted from the overall expenditure obligation. A residual veto power would always rest with the state in this matter. It is not intended to create a body which is too bureaucratic in nature since it is only concerned with the work programme and budget during the exploration stage. It would serve a more important purpose in schooling and educating the local nationals by exposure and experience and so allow for the accumulation of some knowledge in the industry's operational activities. One role of major importance would be in its determination

of a commercial discovery which as suggested, could be made a simpler task if there is resort to an established algebrical formula for decision making and an efficient and prompt reporting system if there is evidence that petroleum has been found.

The Operating and Supervisory Committee would come into existence after a comercial discovery, to overseer developments and production. Ideally, the state should have retained at this point a "carried interest" which would have guaranteed its role as a participant with the national oil company acting as an equal in the preparation of programmes. However, under the existing structure this suggested committee should have the power to call upon the contractor to submit a work programme and budget along guidelines set by its members after having received and reviewed full details of the discovery including its commercial capacity, recoverable reserves and long range forecast for the reservoir. In preparing these proposals, the Committee should be allowed representation at all relevant meetings and retain a right to instruct the contractor on adequate means for undertaking its plans and programmes.

A right to approve proposals would rest with the Committee and in so doing it could make suggestions for modifications or revisions thereby enabling the implementation of methods and practices for a more efficient and optimum development of the petroleum reserves. Approvals of work programmes and budgets should require unanimous approval of the Committee so that the contractor is not

bound against his will. Once proposals are passed, the Committee would be responsible for conducting an evaluation of the work programme and technical obligations and could make recommendations for a more improved development and extraction if necessary. As with the Explorations Committee, all reports, documents, studies and other information required should be provided upon request. Representation by committee members should be allowed at all operating meetings of the contractor who would also be made liable to keep the members continually informed of all current developments and operations, thus ensuring a proper working relationship. For this reason, there should be a duly authorised representative of the contractor who would be responsible for the written instructions and request of the Committee, and he can be held out as an agent of the contractor and the legal link between the parties.

In conclusion, one could say that the joint management structure as suggested should encourage a more educational process for the state's benefit and foster a collaboration and working relationship between the parties. The P.S.C.'s were supposed to usher in an era in which the state would not be a mere "sleeping partner" as under the concession's contracts. However one cannot be overly optimistic for as one study on Indonesia cautioned, the lack of an adequate and trained personnel can mean that, the "legal difference between production sharing contracts and concession's

contracts are often devoid of operational significance."[118] Nevertheless, a contract should have a structure to allow for the acquisition of technology and know-how. The formation of these management committees is intended to institutionalise existing rights and to expand and define them in some cases so as to make the idea of involvement a more productive, meaningful and an educational process for the state. The inherent deficiencies in the state's managerial and technical competence would eventually expose its vulnerability in making use of its rights. Nevertheless, mindful of such shortcomings it was intended to devise a scheme which would prove useful in tutoring the nationals, monitoring the contractor and fostering more stability and pragmatism in the relationship.

(e) Areas for Mutual Regulation

(i) Dispute Settlement

A dispute settlement mechanism provides an agreement, which spans a very long period, with a device for having resilience and flexibility which in turn settles and stabilises future relations. It gives impetus and rejuvenation to matters which otherwise would at times have created upheaval and stagnation, resulting in actions

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118. R. FABRIKANT, "Oil Discovery and Technical Change in South South East Asia, Legal Aspects of Production Sharing Contracts in the Indonesian Petroleum Industry," 1972, Inst. of Southeast Asian Studies, Field REport No. 3, p. 125.

inimical to both interests.

Arbitration is the selected procedure for the settlement of disputes in the contract[119] and also under the general petroleum law.[120] The place for the arbitration is to be Trinidad and the contract is "construed and governed by and in accordance with the laws of Trinidad and Tobago".[121] The procedure used would be in accordance with the local arbitration law.[122] However, there are exceptions to this general rule. For example, in the 1974 Texaco Production Sharing Contract, the Court of Arbitration of the Chamber of Commerce, London, England is used, while the Trinidad-Tesoro agreement makes the International Centre for Settlement of Investment Disputes and the Convention on the Settlement of Investment Disputes between States and Nationals of Other Countries its governing law and body.[123] In petroleum contracts it is not uncommon to make the governing law for the settlement of disputes the local law of the land. This has been done among others, in the U.K., Peru, Norway, Malaysia, Brazil and Guatemala which are all producer countries. However, investors like the security of familiar

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119. Model P.S.C., s. 17(1) and Model Exploration and Production Licence (Land), s. 45.

120. Petrol. Act, 1969, ss. 20, 18.

121. Model P.S.C., s. 18.

122. Revised Laws of Trinidad and Tobago, 1950, c. 7. No. 1.

123. Heads of Agreement between Goct. of Trinidad and Tesoro Petrol. Co., Cl. 22.

and more international adjudication and have requested such on occasion as in Indonesia, where the Rules of Conciliation and Arbitration of the International Chamber of Commerce were used, in Niger and Thailand where the International Bank for Reconstruction and Development Convention obtained and finally Chad, where disputes were submitted to the Hague.

Although there are no reported cases of arbitration in Trinidad, petroleum relations have not been as smooth as one would think. Concern mounted in 1973 when a new pricing scheme was introduced and in one case a company refused to pay the new price. The Texaco refinery productivity and takeover talks have been serious enough to warrant a commission of inquiry while the presently discussed Tesoro takeover has had its share of disputes. Of course, these are the bigger disputes but there are also smaller everyday differences. Arbitration, although a useful resort for larger disputes, may not be particularly suited to the smaller matters. It is costly, complicated and time consuming in an industry where great sums of money are at stake and disputes can result in significant losses to the state and the contractor.

It is suggested that resort to arbitration should only be made in cases of serious and prolonged differences and that more immediate available machinery should be constructed for dealing with disputes. As a first stage, there should be a classification of disputes according to

the category of dispute. In petroleum cases, one can use headings such as Interpretation of Agreement, Taxation, Accounting, Technical and Work Obligation, Administrative and others. The purpose of this categorisation is to allow for an assembly of issues under defined heads and to devise a mechanism which is particularly suited for its remedy. In seeking forums for these disputes the state should look to organisations which are readily accessible, credible and acceptable to both parties, for an opinion which could be obtained inexpensively and in a short space of time. In cases involving the Interpretation of the Agreement, an opinion could be requested from the United Nations Centre on Transnational Corporations which provides an advisory service on petroleum contracts. Taxation matters could be pronounced on by the World Bank advisory service on taxation and fiscal policy, while accounting issues may be deciphered by a firm of international repute such as Peat, Marwick, Mitchell or Price Waterhouse. Technical and Work Obligation disagreements would require a body which has an expertise and current knowledge of the workings of the petroleum industry such as the American Petroleum Institute (A.P.I.) and the Institute of Petroleum, London, England. Both associations are involved in industry practice and can be asked to present a brief in this matter. Administrative grievances are internal and conciliation through a local body mutually organised could be summoned on request. The remaining disputes can be settled by agreement between the

parties or by customary practice decisions. Arbitration should be used as a last resort when all else has failed or an alternative practice is not available.

A system as advocated above would provide the making for an expditious dispute settlement machinery. It would be impartial and acceptable without the expense, time and displeasures associated with the litigation of contentious issues. It is fundamental that when disputes arise, they should not hinder the main objectives of the contract and be settled immediately. As outlined above, decisions would take the form of expert opinions in the same fashion as judgments. The Supreme Court, however, would be available only in those cases where the justiciable disputes are truly legal in nature.

(ii) Renegotiation and Revision

Under the present Production Sharing Contract and exploration and production License, if oil is discovered in commercial quantities, the agreement can run for a period of thirty-one years or more without any obligation to re-negotiate or revise the terms originally entered into. This means that oil companies operating in Trinidad would be under no obligation to reconsider new terms and conditions which may be more equitable in changed circumstances. This reluctance was displayed when the Petroleum Act was

made law.[124] Therefore, changes in the obligations of the contractor, especially fiscal ones, may give rise to disagreement and create a potentially explosive situation. If this should occur, there would have been no prior notice of renegotiation and no pre-arranged settlement procedure. It is proposed to investigate this situation in petroleum contracts and to propose a solution which would allow the expectations of both parties to be fulfilled.

The reason for a review arises mainly from a change of circumstances which comes from an economic or other rearrangement of issues and subsequently renders the contract inequitable to one or both of the parties. This situation is not entirely unfamiliar to jurists. International law has taken cognizance of this imbalance in the widely used concept of rebus sic stantibus while United States law has long recognised a renegotiation of government contracts.[125] O.P.E.C. made allowances for a renego-

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124. Under Petrol. Act, 1969, s. 37 oil companies were required to re-enter into new licenses "upon terms and conditions appropriate to and as reasonably close as possible to those contained in the (existing) license, grant or lease". The Ministry of Petroleum and Mines by its own account stated that, "In the conversion of oil mining leases and licenses granted prior to 1969, the oil companies were very reluctant to accept certain conditions imposed by Government under the new legislation because of their own interpretation of s. 37 of the Act." Annual Administration Report, Ministry of Petroleum and Mines, 1971, p. 17.

125. U.S. Negotiation Act 1951, as amended.

tiation in the event of changed circumstances[126] as did a U.N. Expert Group[127] and the General Assembly of the United Nations.[128]

The reason for the inevitability of renegotiation can be provided if one looks at the nature of the relations between the parties. An inequitable relationship exists at the beginning of the contract because the state, in seeking to have its petroleum resources developed, is interested in attracting foreign capital and technology and so allows terms and conditions heavily weighted in favour of the investor. After the signing of the contract and a commitment is made to expenditure and work, the scale slowly tilts in favour of the State as the foreign company becomes more committed through the supply of further capital, expensive equipment and contracted labour. The advent of a commercial discovery makes the contractor more amenable to the terms of the state since the protection of the investment assumes a role as paramount as the need for returns on invested capital. In spite of this, the foreign contractor

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126. O.P.E.C. Res. XVI 90 of 1968.

127. See Report of the Group of Eminent Persons to Study the Impact of Multinational Corporations on Development and on International Relations, U.N. Doc. E/5500/Rev. 1, ST/ESA/6 (1974).

128. U.N. Doc., G.A. Res. 3202 (S-VI), 16 May 1974 reproduced in (1974) 13 Int. Leg. Mat. 720, "Programme of Action on the Establishment of a New International Economic Order."

finds himself in a position where terms and conditions for the investment, which run for the life of the contract, are weighted in favour of the investor and bear little relationship to the expectation of the state. This could be best explained if one looks at an actual example in the law. Under the Petroleum Taxes (Amendment) Act, 1981 numerous incentives and allowances are made available for exploration activity. In the event of a significant oil find, these incentives would have a greatly reduced importance and are liable to be watered down by changes in the law, for there would be less need for exploration. Consequently, there would be less deductions available in computing taxable income. This would constitute a revision of the law in changed circumstances. The motives for changes of this sort have prompted one U.N. adviser to declare,

> "The truth is that the occasional demand of developing countries for the negotiation of previously agreed petroleum and mining contracts does not flow from their greed and delinquency, but rather from the circumstances under which nearly all such contracts were negotiated."[129]

In the petroleum industry there are many areas where renegotiation and revision can take place including marketing, pollution and conservation obligations but

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129. H. ZAKARIYA, "Petroleum Exploration in Development Countries: The Need for a Global Strategy Based on Public Policy," (Spring 1981) 5 O.P.E.C. Rev., No. 1, p. 15.

perhaps the most used one is fiscal rearrangement. Adjustments in the rate of profit return to the contractor inevitably arise if an excessively high after-tax earning exists, windfall profits become due or simply if the state seeks a more substantial part of the economic rent. Again, the benefit may not only be to the state but a need to renegotiate may benefit the contractor in seeking foreign tax credits available in its home country, as was the case in Peru.[130]

A parallel situation existed in Trinidad. Under the Production Sharing Contract which existed before the passing of the Petroleum Taxes (Amendment) Act, 1981, the state was responsible for paying the taxes of the contractor. Under the contract the total petroleum production was divided into three types of shares A, B, and C. Share A was received by the contractor "for his services rendered under the contract", Share B was equivalent to "Petroleum Profits Tax, Unemployment Levy or any other taxes or impositions ... which the contractor in accordance with law must pay to the Government" while Share C was the remaining

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130. In 1980, the Occidental Production Sharing Contract with Petroleum were renegotiated in order to allow the contractor to benefit from U.S. tax credits. This was achieved by making the contractor directly responsible for taxes rather than having Petro Peru pay it on its behalf. According to Peruvian General Petroleum Law as contained in Decree Law 22774 of 6 Dec. 1970, Petro Peru is authorised "to negotiate and renegotiate petroleum operation contracts" pursuant to the General Basis for Petroleum Contracts of Operations of Exploration and/or Exploitation of Hydrocarbons.

percentage of production which would accrue to the government. The contractor received a fixed amount while th state received an amount equal to the taxes plus the remainder. Such an arrangement contemplated a fixed amount of taxes, but, it was possible for the state to increase its take by simply augmenting the tax liability of the contractor by changing the law or the rules for calculating prices for tax purposes.[131]

This agreement proved unsatisfactory in some ways. First, such an arrangement did not allow the contractor a claim for tax credits under U.S. taxation laws since it was necessary for taxes to be paid directly in order to qualify for these benefits. The P.S.C. arrangements was considered a royalty payment and not a tax payment. This warranted an amendment to the law which was introduced in 1981. It sought to rearrange the tax liability of the contractor and bring it under the general law rather than under the contract. The effect of this change, was beneficial to the contractor and there was an amicable settlement in the interest of both parties. However, when a set "reference price" for calculating taxes was introduced in 1974, it meant a change in the law and an increase in the state's take. It resulted in a dispute with the Trinidad-Tesoro

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131. Under Act 22 1974, Petroleum Taxes Act, 1974, the Minister is:

> "authorised and required to fix by Order for the purposes of the petroleum profits tax, the prices for petroleum won and saved in the petroleum business."

Co.[132] who argued that there should be "sanctity of contract." Essentially although the power existed in the hands of the state for changing the tax laws there was no machinery for negotiating or making obligatory a negotiation of these changes and consequently no legal basis for a contractual rearrangement. This meant that under the present arrangements, the state is unable to effect a change in its own law if this is not in the interest of the Contractor. The need for a written power to renegotiate or revise contracts is therefore necessary.

The installing of compulsory contractual renegotiation clauses is not a new phenomenon in petroleum contracts and has been used extensively. It also has the added benefit of forewarning an investor of a review and can serve to dismantle a potentially unpleasant situation with the passing of new legislation.[133] A form of continual and ongoing discussion on areas of mutual concern or disagreement can supplement actual renegotiations since periodic meetings would inform the parties and highlight areas for discussion in the event of a revision. Indonesian

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132. Trinidad-Tesoro is owned 50:1% by the State and 49.9% by the Tesoro Co. (U.S.). For details of the dispute, see Trinidad Express Newspaper, 8 June, 1975.

133. In Malaysia, with the enactment of the Petroleum Development Act, 1974, the state sought to increase its take and compel renegotiation of contracts with the state oil company, Petronas. This resulted in the withdrawal of the Conoco Oil Co., now a subsidiary of E.I. Du Pont, from investment and exploration activity.

contracts[134] and the recent Sudanese Production Sharing Contract[135] have sought to introduce this type of consultation. It is important to conceive of the contract, not as a static document, but rather as a dynamic one which is constantly reshaping and unfolding as time passes. This attitude would allow the type of growth necessary in long term relationships. As an attestation to this, one can note that every major petroleum producing country has had reason to renegotiate its agreement at some point[136] and it is unrealistic some to freeze rights as stated at the time of initial agree ment, although some countries seek to guarantee this position as the Egyptian P.S.C. sought to

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134. See Indonesian P.S.C. between Pertimina and Indonesian offshore operators Inc., 3 Mar. 1972, s. 10, Cl. 10:1 which provides:
"Periodically Pertimina and the contractor shall meet to discuss the conduct of the Petroleum operations envisaged under the contract and will make every effort to settle amicably any problems arising there from. "Petrol. Concessions Handbook, Vol. 52.

135. See Sudan P.S.C. between Government of Sudan and Burma Oil Exp. Ltd., Eastern Petrol. Co. and Union Texas Trading Corp., 1 June 1980, Cl. 6:9 provides:
"Agreement may be amended or reversed by mutual agreement. Government and contractor shall annually discuss amendments as either party may deem appropriate". Petrol. Concessions Handbook, Vol. 52, p. 19.

136. See Illustrative Cases of Changes in Relationships, including Renegotiation, in the Petroleum Sector, Table 1 in S.K. ASANTE, "Stability of Contractual Relations in the Transnational Investment Process", (1979) Int. Comp. L.Q., p. 401, pp. 420-21.

provide.[137] Further, legislative amendments of fiscal enactments in the public interest and, as in Trinidad, for "peace, order and good government", is a legitimate right of the state and should be exercised for that purpose. The exercise of this right through changes in law is not used exclusively by developing countries in rearranging contractual commitments, for both Norway and the United Kingdom have sought to increase their "take" through this means.[138]

Having established the juridical basis of negotiation and revision clauses and their need in retaining a contract of equity and longevity, it is now proposed to suggest a framework for its use in Trinidad.

Suggested Model for Renegotiation and Revision

In the general petroleum law of Trinidad there should be specified that the state retains a right to re-

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137. In Egyptian Model P.S.C., Art. XVIII(a) provides: "that no regulations, modifications or interpretations ... shall be contrary to or inconsistent with the provisions of this Agreement" and goes further to add in Art XVlll(d)."
"Insofar as all regulations which are duly issued by the Government apply from time to time and are not in accord with the provisions of this Agreement, such regulations shall not apply to the contractor and sub-contractor."

138. In Norway, the Taxation of Submarine Petroleum Resources Act, 1975 and in the U.K. the Oil Taxation Act, 1975, were fiscal measures introduced after negotiation for increasing the tax liability of oil companies.

negotiate and revise petroleum agreements in accordance with the general petroleum policy and objectives of the country. These negotiations should be conducted in accordance with good faith and the reasonable expectation of the parties considering also a fair rate of return on capital for the contractor and the fact that he has provided all the capital on the initial investment.

There should then be machinery for initiating a review of the contract. One means which can be used is that of a standardised general review of the contract every five years, which examines changes in the international petroleum industry and seeks to make the contract more equitable and realistic in terms of those changes. This would prevent contracts from becoming too onerous on the state and of giving the contractor an unconscionable advantage in benefits received. Also, a timely rethinking of the basic underpinnings of the relationship can prevent action inimical to both interests. Another mechanism for keeping abreast with prevailing petroleum industry practice and simultaneously providing more favourable terms to the country, which may in fact have already been given to another country with which the contractor is dealing, is to institute a "most favoured country clause". This means that, in the case of Trinidad, a legitimate demand for a review can be made if a company, with which it is dealing, is found to be offering more favourable terms to a third country. It

is a clause which was used quite effectively in Nigeria[139] and which can be used in renegotiations in Trinidad's Occidental Contracts.[140] Such automatic "trigger clauses" are imperative in order to afford a guaranteed renegotiation at certain times and in certain circumstances.

In the fiscal area, it is also possible to structure a review on a fixed time period basis but certain guarantees should be maintained. The fiscal and taxation provisions are mostly likely to become outmoded with time and may become a very contentious issue between the parties. A review could be on a bi-annual basis but a certain rate of return on invested capital should be guaranteed to the contractor while a certain overall tax ceiling or a fixed formula for its adjustment should be provided. Again, the Peruvian model is most efficacious in this respect. Their tax guarantees recognise the type of fiscal stability necessary for encouraging investment while at the same time allowing for tax adjustments necessary in

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139. In 1962, Nigeria successfully used a "Most-Favoured-African-Nation's-Clause" to bring its Petroleum Profits Act, 1959 more in line with the Libyan law which used posted prices and the expending of royalty.

140. Occidental which operates in Peru has renegotiated its contracts recently as required under Peruvian law and it has also benefitted from a M.F.N. clause. Occidental and four consortia hold nineteen blocks off the North-East Coast of Trinidad totalling 3,000 sq. miles.

the national interest.[141] Again, as previously suggested, the important determinants in devising a model for renegotiation and revision are resilience, equity and good faith, as shown from the Peruvian model. The formula must represent fairly the expectations of both parties and present a determination which is both acceptable and equitable while contemplating the eventuality of revision at defined periods and specific happenings en vérité.

(iii) Termination

Contractual termination denotes the finality of relations between the parties and a severing of any future

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141. A formula is provided for the adjustment of benefits "in kind" received under their production sharing contract. As the contract states:

"Contractor's in kind petroleum compensation is based upon the effective rate of Peruvian income tax under the tax laws and regulations in force on the date of signature. If legal or regulatory modifications occur which change the effective rate of the Peruvian income taxes, contractor's in kind petroleum compensation shall vary in accordance with the following formula:

$$X = Xo\ (1-To) - C\ (T-To)\ (1-T)\ (1-T)$$

where

X = New compensation expressed in percentage
Xo = Current retribution in percentage
T = New income tax rate, in percentage
To = Current tax rate, in percentage
C = A number obtained by dividing the total annual operating cost and deprecition by the total annual revenu from the contract area.

See Cl. 6:11, 1980, Occidental P.S.C. For Exploration and Exploitation in the Jungle (Block 1A-A) modifies contract of 22 June, 1971. BOL/CC/S.A., Supp. 64, p. 31.

relations. In Trinidad, the grounds under which a contract can be terminated are expressly laid out in the law and are fairly uniform revocation clauses for petroleum agreements. The Act lays out, inter alia, the following grounds for the revocation of the contract:[142]

1. Failure to "fulfill work obligations concerning commencement of exploration obligations and drilling ... or failure to meet expense obligations within two consecutive three year periods."

2. Failure to "execute such work obligations as shall have been undertaken by him, under the terms of the license, within the time limits prescribed."

3. A material breach of any other term and condition, "the Minister being the sole judge of such materiality."

4. Failure to meet Minimum Payments, Rent, Royalty, Petroleum Impost or Taxes within three months of becoming due.

5. Wilful misrepresentation of a material particular in the application of the lease.

6. Bankruptcy.

There is the requirement, except in the case of bankruptcy, to give reasonable notice in advance of revocation and to specify the particular ground for the revocation. In those cases where the Minister is the sole judge of the materiality of a breach he must also "require the licensee to remedy the breach and pay compensation." It is suggested that the obligation to correct a breach should be used in all

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142. Petrol. Act, 1969, ss. 17-19.

cases where the breach is capable of remedy within a specified period. This may well exist in practice for breaches are not rigidly penalised but rather sorted out within the administrative bureaucracy.

The effect of a breach is that there is a revocation of "all rights, licenses, privileges and powers conferred upon the licensee by the license and all grants and leases of land." However, on a strict interpretation of the Act, there is a right to have notice and reasons for revocation without which there would be a procedural breach and an invalid revocation. It is submitted that in contracts and licenses with the state, there would be the additional obligation to abide by the principles of natural justice and the audi alteram partem requirement which gives the right to be heard in addition to notice.[143]

In addition to mandatory revocation for breach of contract, a right exists for the voluntary determination of the whole or part of the license and in the event that no commercial discovery takes place within the first six years of the contract. While the contract automatically terminates if there is no discovery, in the case of the voluntary determination of the whole or part of the license there has to be written notice and a fulfillment of previously undertaken obligations. Even in the event of such a determination, the contractor remains liable for "any

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143. See Edward v. Sosat, (1971) 1 Ch. 354.

obligations or liability imposed on or incurred by the licensee under the licence that has not been performed or discharged ..."[144] Aside from mandatory and voluntary determination the law also makes provision for "exigent suspension" of contractual obligations in the event of force majeure which is defined as:[145]

> "any event beyond the licensee's reasonable control and includes war, insurrection, civil commotion, strike, storm, tidal wave, flood, epidemic, explosion, fine, lightening, earthquake or any enactment."

This clause proposes an interesting question in the case of Trinidad insofar as the operations of the Texaco refinery operations are concerned. It poses the question of whether strike action is "beyond the licensee's reasonable control" if a perpetuation of strike activity results from its recalcitrance in accepting reasonable wage and rights demands. This is a particularly pertinent issue for the Oilfield Workers Trade Union, O.W.T.U., a local union, which has used widespread strike action as a negotiation technique in wage demands, the very action of which is now being blamed for the poor performance of the Texaco operations. It would seem to be a questionable defence if a suspension of operations takes place as a result of a strike whose existence is being perpetuated by company

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144. Petrol. Reg., 1970, s. 87.

145. Petrol. Act, 1969, s. 19(2).

stubborness.[146]

The termination of the petroleum agreements is sanctioned under the law. It is available in certain defined situations. Breach of contract is never excusable and the instance of this is unknown in local petroleum agreements because the state has taken the commendable approach of requiring performance bonds and financial guarantee deposits at the signing of the contract. Voluntary determination, subject to existing obligations, is a necessary loosening of relations in the event of the economic futility of future relations. However, the force majeure clause as it relates to strike action is definitely in need of reshaping in order to accurately state the times when a strike would allow or mitigate non-fulfillment of contractual obligations.

Conclusion and Recommendations

From the foregoing analysis it is clear that the present production sharing contract is in need of reform, if it is to fulfill its objective of greater and more effective state participation. Administratively, the state assumes a very passive role. Its function is one of approval rather than of actual participation and in the

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146. See, for a fruitful discussion on this subject, T.J. FARRAR, Economic Development Agreements, A Functional Analysis, (1962) 10 Col. J. Trans. Law 232.

absence of such involvement, its role can easily become one of a mere "rubber stamping" authority. This is dangerous for it allows a continuation of the dependency on the multinational, as it presently exists, and also fails to use an opportunity for involving the state oil company in development.

In the legal regulation, one finds that through the contract, a basic framework of rights and duties is established. However checks and balances can be improved and obligations should be expressed in sufficient detail to make them clear and precise. For example, a clear separation of the definition of "petroleum operations" into exploration, development and exploitation would provide a basic understanding of the rights and duties attached to each stage of operation. A very important omission in the contract is its failure to provide a clause or right to renegotiation. It is only with such progressive clauses that the rights and obligations could survive changes in the relations and be less vulnerable to disagreement and differences between the parties. A great supplement to the contract is the extra-contractual regulation established by statute and regulations which provide the basic state policy and these can be changed by the state, in the exercise of its sovereignty as a law making entity.

The reforms suggested for both legal and administrative structures can, it is submitted, strengthen the role of the state for a more meaningful involvement in

petroleum development. It would allow an assertiveness and redefinition of relations along lines which make a more effective production sharing contract than the exploration and development licence it was intended to replace.

Recommendations: Alternative Contractual Arrangements

The form of contract which regulates petroleum development is important because it is the contract for acquisition of technology which provides the framework under which the state is to participate. It is important then, to have a considered choice since it can determine the state's role over a period of some thirty years.

As advocated earlier, the existing production sharing contract is in need of redefinition. A restructuring is necessary in order to create an advanced production sharing contract which allows development under terms and conditions which are more suited to the needs of the state.

A primary aim of the contract should be state participation in all phases of development. The national oil company should be used as the vehicle for effecting this participation while the state acquires the know-how necessary for running the industry. This should be combined with the use of the technical, financial and commercial resources of the multinational oil interest.

The first suggestion which can be made is that the state uses a "carried interest" formula in all present and

future contracts and incorporate such a requirement into the bidding orders for the allocation of acreages. Under this system, first used in the North Sea development, the state oil company acquires a definite interest at a specific point in the contract, usually after oil or gas has been discovered. In this way the contractor undertakes all initial cost and risk while the state obtains an interest only on discovery. Investment costs are shared beyond this point. This would mean that the state would use the financial and technical services of the contractor and secure an interest when there is more chance of obtaining financing for development, when petroleum has been found. A primary consideration in the use of this system, is that the taxation incentives and deductions recognise that the investor is responsible for the total initial risk investment and so even with the carried interest, the venture should remain attractive for investment.

Another contract which can be used to fulfil similar objectives is the service contract. This contract involves the "hiring of the multinational oil company as a contractor" to undertake exploration and development work. All risk capital is provided by the company and reimbursement only takes place if oil or gas is discovered. In this case, the contractor receives payment in a prescribed form which may include a percentage of crude oil, a preferential right to purchase crude or a percentage of its sales proceeds.

The use of a full service contract, as used in Iran and Brazil among others, sees the national oil company assuming the management of operations and deciding all important issues. It acts as the employer of the contractor for it usually has a monopoly interest, in that all oil and gas rights are vested in it. This shows a lot of confidence in the ability of the national oil company and its capabilities but this is essential if strides are to be taken in developing a local ability. Hence while the service contract allows a use of the technical and financial services of the contractor, it offers also a commercial benefit in that the company can be made the sale's agent of the state's share.

The service contract and the suggested advanced production sharing contract with a "carried interest" share certain basic similarities. In both systems, the national oil company directly participates on behalf of the state and so allows state participation. Also, the contractor supplies the necessary technical, financial and commercial needs of the development programme. The benefit of this approach is that a more effective transfer of technology is likely to take place so as to equip the local company with a skill to handle operations when the contract of acquisition has expired. In addition, it provides an effective means for capturing the economic rent.

In combination with the suggested contracts, the state can enter into transfer of technology agreements

which contain strong training programmes. Specialised contractors or firms may be approached directly to develop local resources for the right to preferentially purchase local crude or for a fee.[147] Alternatively, an exploration service contract may be used for the exploration phase, where the national oil company would manage operations but the contractor undertakes an exploration programme until is found. These services are paid for and training programmes would be used. Lastly, a more modern technical assistance contract can be used. This is a contract for services and can be effectively channelled through a bilateral development agreement between two countries. Trinidad has tapped this avenue by entering into such a contract with PETROBRAS of Brazil.[148]

It is extremely difficult to follow traditionally used labels in suggesting contracts which may be used in petroleum development. Contracts may be very similar al-

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147. This type of contract has been used between C.F.P. (France) and India for the development of the Bombay High area. See Platt's Oilgram News, 14 Aug. 1981, p. 2.

148. See Annual Report, PETROBRAS, 1980, pp. 26-7 where it is stated:
"As a result of the technical assistance contract signed with TRINTOC of Trinidad and Tobago, PETROBRAS has sent technicians to Port-of-Spain for interpretation studies for the state-owned company with a view to selecting areas for immediate drilling. This contract which involves resident technical personnel and administrative personnel on temporary assignment should extend through 1981."
See also, Annual Report, PETROBRAS, 1981, p. 42.

though they are named differently. However, the suggested alternatives seek to achieve certain basic objectives. The use of the national oil company for state participation and training and the utilisation of the financial, technical and commercial resources of the multinational company in developing the resources. The contract should also combine with the petroleum laws to provide a package of benefits which makes investment attractive, assumes a certain rate of return on invested capital and secured the mutual interest of the parties.

CHAPTER FOUR: THE NATIONAL OIL COMPANY: AN EXAMINATION OF ITS POSITION AS AN INSTRUMENT OF THE STATE, ITS ROLE, STATUS, FUNCTION AND ACCOUNTABILITY

A. THE NATIONAL OIL COMPANY: A GENERAL OVERVIEW

1. The Rationale for National Oil Companies

The national oil company is now recognised as an intrinsic part of the petroleum policy of virtually all petroleum exporting and importing nations, it is regarded as an indispensable tool for the mobilisation of policies at both the national and international level. These enterprises now number in excess of eighty, operate in a majority of countries all over the world, and produce in excess of two-thirds of the world's oil. In spite of these impressive figures one finds that the actual role of the company may be a very varied one. In some countries, they play a major role in development and exploration and operate alongside private companies, as is the case in Italy and Canada. In others, although they are possessed of the petroleum rights of the state, they do not manage all aspects of operation as happens in Malaysia, Peru and Indonesia. A role which has become more important is as instruments of the state in joint venture participation, the case of Statoil in Norway and B.N.O.C. in the U.K. best shows this approach. Indeed the role which the state enterprise plays depends on the definition of its functions by the state and while this could be restricted, it is not

unusual to find vertically and horizontally integrated oil companies as in Brazil and India.

Inevitably, one may ask the reason for and evolution of these companies. Perhaps the single most important reason was the maturing of evolving petroleum policies of states and the change generated by the nationalism of the 1950's. However, before looking to the middle of the century, one should point out that certain European nations had state petroleum companies in the 1920's. The Italians had the E.N.I., Ente Nazionale Idrocarburi, which vigorously competed with multinational interest by promoting joint-venture agreements and offering favourable conditions in its "new deal" formula for petroleum development. In 1924, the French formed the Compagnie Française des Pétroles (C.F.P.) to manage shares in the Turkish Petroleum Company given by the San Remo Treaty, 1920. These, together with Austria, initiated the concept of state entities in Europe.

By the 1950's, there was a move towards more nationalistic policies best exhibited by the efforts of Iran and Mexico. Mexico, in 1938, took measures to expropriate the foreign companies which were controlling the exploitation and utilisation of the country's oil reserves. This national legacy was then vested in Petroleos Mexicanos, PEMEX. Similarly, in Iran, the National Iranian Oil Company was established in the aftermath of the nationalisation of the Anglo-Iranian Oil Company in 1951. In

1957, by the Iranian Oil Act, it became the official planning and executing body for the national petroleum efforts. These two examples indicate that these countries, underdeveloped as they were, assumed against great odds the responsibility for running a huge, technologically intensive industry and succeeded. Such was the strength of nationalism and the redefined petroleum policies in this period.

Nationalism carried with it a desire for sovereignty and independence. Newer developing countries recognised it as part of their inalienable right to control the development of their resources. It meant that sovereign nations wanted a "national mobilisation" of resources rather than a "global optimisation" of resources. Important decisions regarding pricing, upgrading, exploration and development were now sought to be made by a national body rather than by multinationalist interest, which did not hold local interest as foremost. As one survey pointed out,[1]

> "the emergence of State oil companies in the developing world has proceeded parallel to the growth of self-awareness, of which it is in part the expression. It is based on the widespread feeling that the control of vital natural resources, on which the nation is in some cases almost entirely dependent, is not a matter which can safely be left in the hands of foreign companies whose interest do not necessarily coincide with those of the host country and which at times may be inimical to them."

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1. Middle East Economic Survey, 1968, referred to by P. FRANKEL, The Rationale of National Oil Companies, (1978) 11 O.P.E.C. Rev. No. 3, 46, p. 49.

Although such theoretical approach sought total national control and decision making, this was not always possible since countries needed the multinational interest for technology. In addition, certain countries subscribed to a mixed economy approach where public and private enterprise existed alongside. Therefore, a policy of state participation, through a national oil company was devised so as to accommodate both interest. The approach of the United Kingdom and Norway best represents this course.

B.N.O.C., the British National Oil Company, was formed as a body "through which Government will exercise their participation rights". It was authorised to give effect to agreements which secured its participation.[2] The rationale behind such participation was threefold: first, it sought to develop a national exploration capability through a national oil company; secondly, the state desired a better knowledge in the technical and economic operations of a petroleum industry, and thirdly, there was a need to secure title to and a right to disposal of a designated share of petroleum produced.[3] In Norway, Statoil was also given authority to participate on behalf of the state[4] and

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2. Petroleum and Submarine Pipeline Act, 1975, s. 2(1).

3. See generally, U.K. Offshore Oil and Gas Policy, Cmnd. No. 5696, 11 July, 1974).

4. Art. 1, Statoil Articles of Association, 1 Jan. 1977 which states:
   "The corporate purpose of Statoil is either by itself, or in participation or co-operation with
   (contd.)

like B.N.O.C. a "carried interest" participation was designed on its behalf. In effect, these participation policies are engineered to allow the national oil company an active and participatory role in both exploration and development while the state also derives an increased fiscal take of the economic rent. More subtly, it provides a training in the technical, managerial and operational know-how for assuming national control.

Another reason for the formation of state petroleum companies is to promote the policies of the state and to act as an instrument for their achievement. In this sense one cannot think of the company as purely a corporate entity for in its wider context it is an arm of the state. The enterprises which are most effective in this role are those which are free of political interference and vibrant and active participants in the industry. The case of Petro-Canada is a good example in focussing on this point. It was established as a Crown Corportion in 1975[5] in order to

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other companies, to carry out exploration, exploitation, transportation, refining and marketing of petroleum and related products and other activities in close relationship with this."

5. The Act Establishing the Corportion, S.C. 1975, c. 61 of 20 July, 1975 states its aim in s. 3, as:
"to establish within energy industries in Canada a Crown owned company with authority to explore for hydrocarbon deposits to negotiate for and acquire a continuity of supply for the needs of Canada, to develop and exploit deposits of hydrocarbons within and without Canada, to carry out research and development projects in relation to hydrocarbons and other fields, and the production, distribution, refining and marketing of fuel."

stimulate the government's policy of Canadian ownership of natural resources, to promote regional investments in resources, to assist in the attainment of self-reliance in petroleum by venturing into exploration efforts in the Arctic and offshore areas. It was stressed that it would operate indepedently alongside the private sector and was not intended to replace it, it was called "a window on the industry". This approach is not novel for these companies are often entrusted with broad political objectives and used as an extension of state planning goals. For example, E.N.I. in Italy was involved in locating sources of supply for its home country, SONATRACH has overseered the sale of Algeria's L.N.G. exports for competitive prices while N.I.O.C. of Iran has competently been training and creating a national manpower capability. In Saudi Arabia, Petromin has been solely responsible for the state's efforts in the diversification of exports by upgrading exports through refining and further processing. The national oil company is largely regarded as the corporate arm of state's energy policy which accounts for the delicate independence which exists in its relations to the state.

As the national oil company grows and integrates in its efforts, its role becomes one which is larger than the domestic industry. The petroleum industry is an international industry and for a company to insulate itself and operate in isolation, it is planning its demise. The dismantling of the international multinational network and its

replacement by smaller nationally-oriented units is but one step in the evolutionary process. As one observer suggested, it means going from "emancipation and self-determination" to "co-existence and co-ordination".[6] Some of the more progressive oil companies such as N.I.O.C. in Iran, SONATRACH of Algeria and Petrobras of Brazil, have taken steps to internationalise their operations. Others have taken more of an integrationist approach as with A.R.P.E.L., Asistencia Reciproca Petrolera Estatal Latin-americana and in the Arab group, O.A.P.E.C., Organisation of Arab Petroleum Exporting Countries. This integration of activity means the strengthening of ties in order to achieve a collective and balanced growth.[7] But what is inevitable, is that the national oil companies have been leaving the domestic arena in pursuit of bilateral and multilateral project development in an effort to achieve a more collective economic security.

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6. See P. FRANKEL, The Rationale of National Oil Companies, op. cit., supra, note 1.

7. See Art. 2, Constituent Instrument O.A.P.E.C, which states:
   "The principal objective of the organisation and co-operation of the members in various forms of economic activity in the petroleum industry, the realisation of the closest ties among them in this field, and the determination of ways and means of safeguarding the legitimate interests of its members individually and collectively; the unification of efforts to ensure the flows of petroleum to its consumer markets on equitable and reasonable terms, and the creation of a suitable climate for capital and expertise invested in the petroleum industry in the member countries."

In conclusion, one can say that the rise of the national oil company has been due to a series of factors. The rationale for its existence is rooted in the need for a national mobilisation of the state's efforts, which aims to achieve more local participation and control of its resources and the creation of a capability and "know-how" which allows such to be meaningful. In this respect, the national oil company is in many ways an entreprise témoin, a witness in a learning process. However, it is unquestionably an important part of a contemporary petroleum policy, a necessary enterprise for survival in the international industry and a responsive representative of the state's broader policies in the oil and gas sector.

2. The Form, Structure and Control of National Oil Companies: A Comparative Study

Introduction

A comparative understanding of state petroleum enterprises provides a useful overview when focussing on a particular entity. It allows an examination of practices in other countries thereby providing an insight into certain discernible trends. In so doing, it suggests the attitude and practice which are employed in achieving declared objectives. However, there are certain basic premises from which state policy operates. State petroleum enterprises are always instruments of the state policy and

economic development. They are entrusted with an autonomous operation only in so far as their basic object is optimum profitably and development in the petroleum sector.

In looking comparatively at the industry, it is intended to look essentially at the state's role vis-à-vis the company. Also, to identify those characteristic features of form, structure and control which create a common modus operandi in the petroleum industry. It is submitted that there is a degree of common structuring of entities whether or not they originate in powerful export-oriented countries such as O.P.E.C. nations or in petroleum rich but cash poor countries such as Bangladesh. Clearly, the underlying motivation seems to be that they should be business enterprises but under state control.

(a) Form, Structure, Control

In the first place, one has to look at the arrangements which exist for allowing the company to administer the resources of the state. There can be found three main attitudes taken in this respect: the company is given a total vesting of petroleum rights, a partial vesting or an exclusive right to develop and exploit rather than an actual vesting. This assignment immediately authorises the national entity to act on behalf of the state and creates it

as a repository of rights.[8] A similar situation exists in a partial vesting, as in Trinidad and Libya, but the state retains a proprietary right to its resources and only allows a phased allocation to its company, for use on its own or in participation with other interest.[9] An exclusivity of operation usually authorises a company to explore for and exploit, produce and refine petroleum.[10] In all cases, the state sees its national oil company as its agent. It is therefore, a natural and logical step to delegate these resources since the company is an instrument of the state and so would allow a rapid development of resources while retaining national control.

The next step, after investing the state corporation with the resources of the state, is to clothe this commercial vehicle with functions and powers. Companies have been found to possess a complete range of powers involving both petroleum and petroleum related activities. A good example of such bestowing of power is to be found with the

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8. See for example, Art. 3, Memo and Articles of Assoc., Petronas; also, Petroleum Development Act 1974, Malaysia. Art. 3 authorises Petronas, the national oil company to:
   "acquire, hold, maintain and keep the ownership rights, liberties and privileges in respect of petroleum lying offshore and onshore."

9. See Law No. 3, 1968 Establishing the Libyan General Petroleum Corporation, Article 3.

10. See Act 12 1979, Jamaica Petroleum Act, 1979, s. 6(1).

Iraq Petroleum Company which

> "shall be to engage, both inside and outside Iraq in all the various stages of the petroleum industry including exploration and drilling for oil and natural hydrocarbons, the production, transportation, refining, storage, distribution and processing of such substances, their products and derivatives, equipment, pertaining thereto, petroleum chemicals and related industries and the trading in all such substances."[11]

Although operating outside of territorial waters may in some cases be subject to approval,[12] the Company is given a monopoly status in its operation within the country. Such broad and all encompassing powers are intended to create a centralisation of activities, an integrated effort and a sustained and encouraged growth in the development of the petroleum sector.

In the conduct of its activities, the corporate purpose is inextricably bound to the national purpose. This recognises its role as a medium of state policy and efforts. Such a role is sometimes expressly mandated under the Company's constituent instrument as in Argentina where Y.P.F. is called the "Executive entity of the national oil policy."[13] In other jurisdictions the mandate is less

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11. Law No. 123, 4 Sept. 1967, establishing Iraq National Oil Co., Art. 3(1).

12. See s. 2(1)(2) Petroleum Submarine Pipeline Act, 1975 statute establishing B.N.O.C.

13. Decree 1080, 19 April, 1977, s. 5, promulgating organic structure of Yacimiento Petroliferos Fiscales, (Y.P.F.).

obvious. In Britain, B.N.O.C. is asked in formulating and carrying out its plans "to act on lines settled from time to time by the Corporation with the approval of the Secretary of State"[14] which is tantamount to requesting obedience to state policy. However fashioned, there must be a mutuality of interest between the company and the state, plans must be mutually agreeable and the commercial pursuits must be defined by the political milestones to be achieved.

The legal form of the enterprise is usually the commercial public corporation which has a separate legal identity, perpetual succession and a common seal. It is legally separate from the state and run by a semi-independent board which is subject to ministerial control and parliamentary accountability. The company can develop into a holding company with subsidiary operating companies if a diversification of interest has taken place or it can be in a simple monolithic mould if it is still in the formative stages. A clear intention is always to maintain an independence of operation between the company and the ministry for they perform diametrically opposed tasks.[15]

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14. B.N.O.C. Statute, s. 3(1).

15. An interesting recent development in this area has been the case of Nigeria. The Nigerian National Oil Company, a holding company, has been integrated with the Petroleum Inspectorate, formally the Ministry of Energy. This hybrid structure represents a sort of "commercialised government department" which does not appear to have recognised the basic regulatory

(contd.)

Within the internal structure of the companies one finds that a basic ingredient is the desire to establish autonomous entities but not without control and accountability. In the Arab O.P.E.C. nations there is a hierarchical form which places a minister or a top ranking official on the Board. The Company is attached to a ministry, usually the Ministry of Finance or Petroleum with overall supervision and direction being exercised by a Council of Ministers.[16] The Council establishes oil policy. If the Minister of Oil is the head of the Board, as in Saudi Arabia, he can make "proposals" to it while the Board is responsible for administration and management. Their actions are sometimes subject to "approval" by the Council which also mediates differences between the Board and the Minister. This structure sees a rigid supervision by the political forces and this is understandable because of the dominant and political role petroleum plays in the affairs of the state.

In the model founded on the British public corporation, there is a bestowing of an autonomous existence on to

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function of a government department and the commercial function of a national oil company.

16. See Iraq Oil Co. Statute, Art 15; Lybia Oil Co. Statute, s. 13(4). In Kuwait, this body is called "Supreme Council of Petroleum". See s. 16, Decree dated 12 Jan. 1980, s. 16, promulgating and containing Law 6 of 21 Jan. 1980 containing Memo and Articles of Kuwait Petrol. Co. and in Iran, it is a joint stock company with a "general meeting of shareholders" made up of ministers, see N.I.O.C. Statute, Art. 28.

the Board but important checks are reserved for the Minister who can control and monitor operations. The most important one is the right given to the Minister to give "specific and general directions in the public interest." His control is also exercised through appointments, reviews, audit and a right to be kept informed and to be given records. Financial control entails the annual sanctioning of a budget and a prior approval in borrowing.[17]

Accountability is a constituent part of the control structure and the company is usually called upon to deliver books, accounts records, annual reports and an unending obligation to provide "such returns and statements and such particulars in regard to any proposed or existing programme".[18] A necessary part of the assessment of management practice arises from the audit which may be undertaken by an independent party or the Auditor General[19] who is asked to present a "true and correct view" of the accounts.[20] These are then "laid before Parliament" which

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17. See B.N.O.C. Statute, Art. 4(d).

18. See Act 43 1959, Oil and Gas Commission Act 1959, 18 Sept. 1959, s. 23(1), India ONGC.

19. See Jamaican Petroleum Act, 1979, s. 13(3).

20. See Bangladesh Industrial Enterprises (Nationalisation) Order 1972, s. 22(3) as promulgated by Presidents Order 27 of 26 Mar. 1972 where the auditor is asked:
"whether in their opinion the balance sheet is a full and fair balance sheet and contains all necessary particulars and is properly drawn up so as to exhibit a true and correct view of the state of affairs of the Corporation."

is constituted as the highest tribunal of review.

In both O.P.E.C. and British models one finds similarities. The Minister is given directional power in guaranteeing that policies and objectives of the state are undertaken. The Parliament, like the Council of Ministers, takes the place of the consumers and taxpayers and is the political custodian to whom the Company is ultimately responsible. Essentially, checks and balances are imposed on the otherwise autonomous Board of Directors in order to provide a degree of control and accountability.

The last area to be examined is financing. It is necessary for state enterprises to have the competence to undertake a proper and efficient pursuit of their objectives. In the O.P.E.C. area one finds viable, solvent and integrated companies which are properly financed and capable of raising loan capital quite easily. In the other countries, there are smaller, less solvent and minimally integrated companies which are able to raise very little by way of loan capital and depend on development assistance for their operation. It is imperative for a company to have a financial autonomy in order to exist as a commercial entity. In looking at sources of capital and assets in petroleum companies one can identify the following:

1. Property and funds provided by government.
2. Assets and funds granted to the company from a previously owned foreign enterprise.
3. Share capital and equity capital provided by a state.

These are usually the basic resources from which the company starts, in the hope of being able to generate its own capital and command its own loans. As a means of supplementing these sources one can state other avenues which are utilised. These include:

1. Borrowing and injection of capital through soft loans provided through development finance companies.
2. Issue of interest bearing bonds locally or by foreign investor interest.
3. Reinvested profits and surplus.
4. Loans from international sources.

However, it is necessary that a company be profitable or potentially so, in order to obtain loan capital and profit surpluses. Therefore, it must be funded properly at the start.

If one looks at the National Nigerian Petroleum Company and the Iraq Petroleum Company, one is able to see the differences in initial funding and its consequences. Nigeria has provided no assignment of rights, no equity base while loan funding is to be approved by higher authority and borrowing by the Federal Executive Council. It is also dependent on annual appropriations for its annual budget of working capital. This Company would be considered weak and unable to generate its own capital base. Iraq on the other hand, has given a capitalised fund while the remainder of its unpaid capital is guaranteed by the Treasury. Such a position allows the total state resources

to be at the disposal of the Company, up to the sum of its authorised capital. It can now operate to generate profit and obtain loan financing on the national and international financial market. Hence, one is able to understand the implications of a proper financing structure and budget for an operating commercial entity.

It is understandable in countries such as Norway or Britain where there are participation interest financed by the contractor or production-sharing contracts with no cost recovery as in Trinidad and Peru, that there is perhaps less need for financing at the exploration stage. This reduces initial capital outlay but this delegated financing is available mainly to countries with good petroleum or gas prospects. However, the basic precondition is that it is essential to have a company with a subtantially paid up capital, totally or partially assigned petroleum rights plus the financial backing to raise loan capital and a directive to retain profits until the capital is fully subscribed and reserve funds have been financed. Unfortunately, due to the financial disequilibria which exist one finds that state petroleum enterprises range from weak supported entities to financial giants such as N.I.O.C. in Iran.

It has been the intention to show certain features which suggest an evolving modus operandi for a public corporation in the petroleum sector. Although it

possesses the underlying features of a state enterprise there are refinements and variations induced by its petroleum character. It is undoubtedly designed to undertake broad and important duties with a national development policy.

3. Public Corporation as an Instrument of Development

The public corporation is frequently used as an instrument in the process of developing and mobilising the resources of the state. Its intervention, in developing countries, is invariably to act in the interest of the general development of the country which is not always left to the private enterprise. However, it has assumed an even broader purpose in that it attempts to create an enhanced managerial and administrative structure for the regulation of certain sectors of the economy. Since it operates outside of the framework of the government department it is free from the bureaucracy of the civil service and the "government by civil service" type of administration which has arisen under the inherited British system. In operating through separate agencies which are guided by business and commercial principles and are held separately accountable, there is created an agency which is its own master and commander of its own destiny. In actual fact, the public corporation has become an instrument of national

development within the economic system classified as a "mixed system" where public and private enterprises exist in juxtaposition.

There are certain characteristics which are applicable to the public corporation. Its attributes include:[21]

1. It is created by a special statutory instrument of the Parliament.
2. A separate legal personality.
3. Administration is conducted by a Board which is appointed by a designated Minister.
4. The Corporation is responsible to the Government which is its symbolic shareholder.
5. Employees are not civil servants.
6. The assets of the company are revenue-earning assets which are usually taken over from private ownership. If however, they have not been so acquired then they may be Corporation stock with a Treasury guarantee.
7. The Corporation is usually subject to private accounting and auditing.
8. These companies are autonomous and operate as private legal entities with full legal liability and without privileges or immunities.

Hence, the public corporation has the basic attributes of independence in a separate juridical personality, a separate budget and a designated and separate body for management and decision-making. The commercial public corporation is a creature which acts according to its constituent instrument which is usually for profit-oriented reasons.

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21. W. FRIEDMAN, Public Corporations

The irony of this type of entity is that although it is independent it is subject to ministerial control which raises questions of the dividing line between its autonomy and control. Another area in which the demarcation may appear blurred is that its formation must have been instigated by broad, social and political objectives, yet it is portrayed as a commercial company. These are areas which would be investigated in looking at the petroleum industry and the legal entities created for its administration.

B. National Perspective: National Petroleum Companies in Trinidad

Introduction

In keeping with a policy of restructuring the petroleum industry and of bringing it more in line with international practice, two important changes occurred in 1969. The first, as indicated earlier, was the establishment of more up-to-date and revised laws for regulating the industry as achieved through the Petroleum Act and its Regulations. The second was to establish a national petroleum enterprise to implement government policy in the area. Another development which is important when looking at state regulation was the takeover of the Shell Trinidad Ltd. operations and the formation of the Trinidad and Tobago Oil Company, TRINTOC, in 1974. As a result two state petroleum companies exist in law.

It is important to look at the role of these two companies in establishing state policy. Trinidad and Tobago National Petroleum Company (hereinafter called the National Petroleum Company) was formed by an act in 1969, in order to "manage and develop petroleum resources in Trinidad and Tobago". It was clearly part of the long-term strategy of the country and arose out of a desire for compliance with international practice. However, it has not been used as such and although its powers and composition are stated, it has remained an entity waiting to be activated. TRINTOC, on the other hand, has been active and is largely recognised as the entrepreneurial arm of state policy in the petroleum industry. Its multi-authorising objects clause allows all petroleum operations to take place but it has remained as a holding and managing company for the assets it inherited.

Recently, there have been on-going talks between the Government and the Tesoro Petroleum Corporation and Texaco Trinidad Ltd. for the nationalisation of their interest in the country. Also, due to the paramount importance of petroleum and its related industries in the local economy, the Minister of Finance has seen fit to use the National Petroleum Company. He has stated that the "time has to come to breathe life into the legislation" enacted for the formation of the Company the principal objective of which is:

> "promoting the economy of Trinidad and Tobago, by undertaking the exploration, exploitation and management of the petroleum resources of the country and by ensuring the more effective participation of the people of Trinidad and Tobago in the development and utilization of these resources."[22]

Thus attesting to its once dormant and now reactivated role as a state petroleum entity.

It is proposed to examine the legal character, powers, composition, financial structure and status of both the National Petroleum Company and TRINTOC. In addition their relationship to other instruments of control, accountability and direction will be considered. Such an investigation should give both an a priori and an a posteriori description of the local state enterprises in the petroleum sector and their ability to function as instruments of policy. In conclusion, the organic structure will be evaluated and a suggestion will be made for a more enhanced and integrated framework.

1. Trinidad and Tobago National Petroleum Company

Introduction

The National Petroleum Company, formed by the National Petroleum Company Act 1969[23] is a public corporation formed by Parliament. It is fashioned according to

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22. Budget Speech, Govt. of Trinidad and Tobago, 1983, pp. 43-44.

23. Act 33 1969, National Petroleum Company Act, 1969, hereinafter cited as Nat. Petrol. Co. Act, 1969.

the model of the public corporation found in Britain with a Ministerial head, semi-autonomous board and public accountability. Although this modus operandi has been used before in other sectors of the economy, it is the first attempt to impose such a format in the petroleum sector.

(a) Power and Function

The Act which establishes the Company contemplates a three-fold purpose for the entity and these are:

1. To act as a commercial public company.
2. As an instrument of government policy.
3. As an advisor to government in questions of petroleum development.

The Company is created as a "body corporate"[24] which "shall conduct its activities along business lines"[25] so recognising the corporate and commercial status of the body. The underlying basis for a commercial public corporation is that it is a profit-oriented body and not one which is formed exclusively for regulatory or managerial purposes. In the conduct of its affair it closely resembles a private company registered under the company law which seeks to make business profit and maintain a financial solvency, however, the commercial public corporation

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24. Id., s. 3(2).

25. Id., s. 20(3).

has a significantly different corporate structure. Lord Denning in the famous case Tamlin v. Hannaford[26] identified the difference in stating that

> ... "there are no shareholders to subscribe the capital or to have a voice in its affairs. The money which the corporation needs is not raised by the issue of shares but by borrowing; and its borrowing is not secured by debentures, but is guaranteed by the Treasury. If it cannot repay, the loss falls on the Consolidated Fund ... that is to say, on the taxpayear."[27]

Given such a difference, it is understandable that the corporation, which is designed to undertake enterpreneurial efforts in the petroleum sector, has properly defined public controls and accountability mechanisms.

One of the primary functions of the company is to promote the combined effort of national economic prosperity and the advancement of state participation in order to accord more national control of the petroleum industry by the people of the country. As the Act states:[28]

> "It shall be the function of the Company to promote the economy of Trinidad and Tobago by undertaking the exploration, exploitation and management of petroleum resources of the country and by ensuring the more effective participation of the People of Trinidad and Tobago in the development of utilization of these resources."

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26. [1950] 1 K.B. 18.

27. Id., p. 23.

28. Nat. Petrol. Co. Act, 1969, s. 4.

As further attestation to its role as a vehicle for the national mobilisation of broader, social and political objectives the Corporation is authorised to "initiate ... training programmes designed to ensure that nationals ... are provided with training, qualification and experience."[29] It is evident that the Company is seen as an arm of the state, an instrument through which economic development, participation and training can be achieved so as to fulfill basic government policy in the petroleum sector.

In its role as an advisor, the Board of Directors of the Company, which would represent the best qualified and most knowledgeable group of the nation's petroleum personnel, is made a body which the Minister can address for direction. The Act states:[30]

> "The Minister may require the Board to advise him on all aspects of the petroleum and petrochemical industries on which he seeks advice and when so required the Board shall advise the Minister accordingly."

Presumably, the type of advice which would be requested would be of a commercial planning nature, since the Company is constituted for business reasons, however, a request for other types of advice is not expressly precluded. It also establishes a working relationship between the Minister and

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29. Id., s. 6(e).

30. Id., s. 13.

the Board in matters other than company issues and so allows for a rationalisation of the policies of these two distinct bodies. It would be difficult, however, to reconcile its role as a policy maker and confidant of the state while participating under the law as an equal with the private companies, especially in cases where a joint venture interest is involved.

The Company has been given powers which are of both a general and a specific nature, in order to undertake and fulfill its functions as stated in the Act. Like many state petroleum enterprises in developing countries, it is seen as an "integrated" company with power to undertake both "upstream" and "downstream" activities. Its general power is an authorisation to

> "engage directly or indirectly in all aspects of the petroleum and petrochemical industries whether these relate to exploration, exploitation, manufacturing, refining, marketing, transport (by land, sea or air), importing, exporting, purchasing or exchange or any other activity connected with or arising out of these industries."

The right to engage "directly or indirectly" definitely contemplates the fulfillment of these powers through a delegation of responsibility to subsidiaries or in joint association with another company. Such a structure and range of power means that, at least theoretically, the national company would control or be involved in every stage of petroleum activity from well head to gaz nuzzle which shows a policy of state monopoly of the petroleum

sector.

In the realisation of its broader more general powers, the Company has been given specific powers which are largely related to its status as a commercial company. These include, inter alia,[31] power to:

> "(a) operate or manage on assignment from the Government any Government interest in petroleum or other rights in respect of Crown Lands or other land and whether these relate to exploration, exploitation, manufacturing or marketing;
>
> (b) acquire shares, stock, bonds or other assets or otherwise participate in any undertaking engaged in the petroleum or petrochemical industries;
>
> (c) cause subsidiary, ancillary or associated companies to be established;
>
> (d) enter into any form of association with other enterprises which will tend to the more effective performance of its functions;
>
> (e) grant loans to or invest money in any undertaking connected with petroleum or petrochemical industries;
>
> (f) acquire, hold and dispose of real or personal property or rights in real or personal property."

In giving such wide powers the company is given a chance to grow and operate in a business setting. Its right to create subsidiaries would mean that it would be an operating as well as a holding company and consequently there would be a concentration of effort and personnel under the aegis of the parent company which would serve as a

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31. Id., s. 6.

directing mind in the establishment of an integrated effort. It is perhaps with this in mind that the state sought to make the Company a repository of petroleum rights which may be assigned to it. The effect of this overall structure is to create an entity with a broad range of power to undertake the running of an industry which is clothed with certain commercial and business privileges in order to realise its power and to represent the enterpreneurial policies and objectives of the government.

The National Petroleum Company is the natural instrument of state policy, it cannot be separated from the State. In this sense, it is understandable that its powers are not absolute, but are fettered by the residual power given by the Minister to limit their exercise in the "public interest". He is authorised "whenever he deems it expedient in the public interest so to do limit the exercise as he may specify[32] and also to issue "directions" to the Board which they must comply with.[33] The purpose of allowing this type of intervention is to exercise a degree of control over the enterprise in its operation and policies so as to ensure compliance with basic policy objectives established by the Government for the state. Hence, the ultimate decider of the national welfare and public good remains the state.

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32. Id., s. 7.

33. Id., s. 17.

(b) Structure and Organisation

The structure of the Company shows three main organs which operate and direct its activities and these are the Minister, the Board of Directors and the General Manager. The Minister is responsible as a representative of the Government to keep a watchful eye over the corporate activities in the name of the national interest, the Board of Directors is a policy-oriented body which charts a course for the entity, while the General Manager implements directorial policy and provides the co-ordination for day-to-day administration.

The Board of Directors represents a cross-section of interest which brings together people capable of providing the corporate, functional and strategic planning and policy for the Company. It is their aim to overseer the direction of the entity so as to guarantee its financial solvency and entrepreneurial success. The National Petroleum Company draws its talent from an array of persons who shall be:[34]

> "not fewer than five or more than nine directors appointed by the Minister from among persons who have special qualifications in, and have had experience of matters relating to petroleum engineering, chemical engineering, business management, geology, geophysics, marketing, labour relations, accountancy, economics, finance and law."

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34. Id., s. 9.

As is evident, the pool from which the directorial talent is to be recruited is prescribed, so it is not a completely unfettered power of recruitment which is given to the Minister. There is no restriction on the recruiting of civil servants who constitute the largest group for recruiting directorial talent in a small developing country.

The Board itself is supposed to be autonomous and independent and concerned with operational policy within the precincts of broad governmental policies. However, no where in the Act is there a clear indication of the Board's powers and the distinction between their "sub-policy" and broader policies appears to be a blurred one which is incapable of precise definition and which may be subject to some overlapping between the parties. In this sense, the structure lacks a clear-cut compartmentalisation of organs which in turn can operate to deprive the entity of its autonomous character. The only definite duties given to the Board are to appoint a secretary and such officers and employees as may be necessary,[35] to submit an annual budget to the Minister for approval[36] and a duty to "manage" the Company.

A further source of concern in the organic structure is the hierarchical nature of the relationship of the Board to the Minister and its effects on the autonomy of

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35. Id., s. 11.

36. Id., s. 19(4).

the entity. First, there is relatively no security of tenure for the directors whose appointment may be revoked if the Minister finds it "expedient to do so."[37] This would seem to be a potent weapon for removing recalcitrant or non-compromising persons, although the threat as such may be greater than its actual use. Secondly, the Board is made subject to a virtually undefined power of intervention by the Minister to limit its powers in the public interest or to request its compliance with his directions. In a political milieu such as Trinidad, this can be a virtual floodgate for governmental interference and consequently a reduction of the Board to the subservience of the Minister. A useful check could be to allow the Board a right to overrule the Minister in certain specified matters.

The other official of the Company is the General Manager, who is appointed by the Minister and subject to the directions of the Board, and is responsible for the administration of the Company. It is a full-time position and one which seeks the implementation of directorial policy. Within the stratification of the Company the Board of Directors serves as a buffer between the pure political power of the Minister and the managerial role of the General Manager. This can be best seen from the budget approval procedure. The General Manager has to "prepare and present" the budget to the Board who then, together

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37. Id., ss. 9(2) and (3).

with their comments, seek Ministerial approval. There is no legal link between the Minister and the General Manager which removes the former from the daily administration of the enterprise, he must act through the Board in order to deal with the Company. However, the Act is again unclear as to the relationship of the Board to the General Manager. Any constraints placed on the Board should be expressly spelt out so as to reduce the potential for conflict between the parties and to have a clear idea of the responsibilities delegated to both General Manager and Board.

(c) Budget and Operating Fund

The form of financing of an entity reveals the extent to which it is autonomous and its capability for growth and self-sustenance. Its financial capability determines whether it would be like a weak and helpless beggar seeking handouts in order to survive or an independent and successful businessman who has handouts to give. As in this saga, a national petroleum enterprise needs the leverage afforded by a well endowed-budget in order to make a contribution to the national treasury while having a sense of corporate integrity both nationally and internationally. In looking at the Trinidad and Tobago National Petroleum Company, one has to look at both its equity and loan base in order to determine whether its capitalisation

allows a financial adequacy to promote growth and an independence in its commercial pursuits.

The Company was provided with no authorised capital but was made legally entitled to certain revenue earning assets which would be assigned to it by the state. These assets were to consist of:[38]

> "(a) such exploration, exploitation and related rights as may be assigned to it by the Government;
>
> (b) such real and personal property (including things in action) as may be transferred to it by the Government;
>
> (c) real and personal property acquired otherwise than by assignment from the Government;
>
> (d) that portion of the profits which it may hold for the development of its activities."

There was never an assignment of any rights, assets or properties to the Company for its development, exploitation or management. In terms of profits, there is to be an apportionment by the Minister of Finance with a portion going into the national funds and[39]

> "the remainder of such profits shall be used for the purpose of expanding the activities of the Company and for the provision of special reserves or of sinking funds as the Minister may approve."

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38. Id., s. 18.

39. Id., s. 21(2).

The reason for this discretionary allocation of profit is because "any profits realised by its operations shall accrue to the Government." It is questionable whether the Corporation could be directed to "conduct its activities along business lines" and still have to pay over its profits to the state. It seems to be an anomalous situation. A still more ambiguous situation is that it is unrealistic to constitute a company as a commercial enterprise and not to make any capital grants or assignments of assets. This means that the Company is deprived of its equity base and asked to operate without any reserves while being dependent on a discretionary apportionment of profits to conduct company activities. Hence, there appears to be no financial independence for the Company which must also submit its annual budget for approval by the Minister.[40] The total effect of these financial provisions is to subject the Company to the needs of the national treasury and so to have deprived it of its autonomy. However, one should look to its power to borrow and secure loans for these two cases where the entity can also obtain capital for its operations.

The reason for borrowing would be on account of an insufficient equity base from which operations are to be conducted. It is also a supplementary source of financing and a means of realising non-governmental funds from the

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40. Id., s. 19(3).

open market but which, unlike equity funds, has attached to it a cost factor in the form of interest payments. The National Petroleum Company is authorised to raise money by borrowing but there are important restrictions. Aside from overdraft loans which may be obtained as a temporary credit tie-over, the Company may, with the approval of the Minister of Finance, borrow for the following purposes:[41]

(a) the provision of working capital;

(b) acquisition of share or other interest in petroleum operating enterprises;

(c) establishment of subsidiaries and acquisition of interests in other undertakings;

(d) meeting expenditure chargeable to capital account.

The Minister of Finance is also to guarantee such loans in the "manner and on such conditions" as he may determine with the actual money for so doing coming from the Consolidated Fund, a taxpayer created account.[42] Since the loan capital is authorised in areas which are fundamental in a growing enterprise, it would be an important source of financing. However, the securing of the loans by the State increases the dependency of the Company on it and operates to render circumscribed its sphere of operation. Perhaps more seriously, the Company is not made responsible for its actions and this severely diminishes its independent

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41. Id., ss. 22(2)(a), (b), (c), (d).

42. Id., ss. 23(1), (2).

status.

The financial provisions in the Act which establish the state petroleum enterprise suggest certain major features. In the first place, capitalisation has taken four main forms, equity, loans, reinvestment surpluses and profits and Exchequer grants[45]. The equity capital has taken the form of the assignemnt of rights, real and personal property as may be given to the Corporation. When there has been no grant of these the initiative of the Company is removed, it is deprived of a viable operation's base and increases its dependency on loan capital as a source of financing. Loan capital is the other source of financing and this is intended to provide "working capital" to the Company which means that a line of credit is to be extended until such time as the entity can generate its own base capital. Consequently, it may not be a short-term grant. A shortcoming of this sort of system hinges on the inadequacy of the domestic capital market in a small developing country which is unable to realise the sort of money necessary for petroleum operations. If the international money market is explored, insurance companies and pension fund bond issues may provide needed capital on a long-term basis but it can be a serious drain on the foreign

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45. Id., s. 20(3), Act 33 of 1969 which states:
"The Government may allocate to the Company in respect of any one year the whole or part of any sum required to cover any deficit disclosed by the budget."

exchange reserves of the country if the enterprise proves unsuccessful, since the Minister of Finance guarantees such loans. Again, this is where one finds cause for disagreement. The fact that there is a Government guarantee for a loan would definitely enhance the chances of obtaining it, however, it is not a favoured policy to allow an enterprise to be guaranteed loans on the strength of the national coffers. It should be made to stand on its own economic strength so that it can be tested on the open market without the backing of the national coffers.

It is indeed advisable that the Company should have a composite capitalisation of loan and equity funds so that complete reliance is not placed on the state's resources while the resilience of the entity is exposed to the capital market. However, since borrowed money carries interest and repayment charges, a degree of financial discipline should be exercised in the stating of a debt-equity ratio. This means that loan capital should not exceed a reasonable proportion of the capital base at any given time. Besides making the Company an attractive borrower, it does not create a burden on its reserves in a period of limited profitability and economic downturn.

An imperative prerequisite for making the Company a self-perpetuating body is that it should control its own funds. The apportionment of a part of the profits to provide financing for "expanding the activities" of the

Company and in creating "special reserves" or "sinking funds" is recognition of the need to "plough back" part of its self-generated revenue as a reserve base. It is understandable that the Government seeks the return of the profits of the Company into the "national fund" as a sort of "dividend" payment of the money it has invested. Also, such funds form part of the total Government pool employed in national economic development. Nevertheless, there are cogent arguments for a ploughing back of the total profits under the present structure. Economically, it would be better for the enterprise to have a capital base to work from, which would not be dependent on apportionments of the state so that long range planning and investment can take place. Also, re-employed profits in a successful company can provide the basis of its revenue funds which in turn sustain long range investment and expansion possibility. Moreover, the entity was created to "manage and develop" the petroleum sector, to drain it of its reserves and profit is to recognise its purpose as solely a source of revenue to the state. Administratively, the enterprise would be less shackled by the bureaucracy of the civil service in that it would have some funds of its own without being dependent on ministerial discretion.

Further evidence of the restraint placed on the financial independence of the Company concerns its annual budget. The annual operation's budget of the Company can

only be authorised if the Minister has given his approval.[44] In real terms, this means that a case has to be made out for funds annually which may see a reduced quota and an ill-timed and delayed approval. Consequently, the Company would be unable to plan further than a year ahead and incapable of taking calculated risks which are so essential in the commercial world. As one U.N. consultant warns of annual grants to state petroleum companies:[45]

> "Considering its business on the basis of annual grants permits it only to exist. It can take roots, flourish, and establish an independent identity only on the basis of its own capital. Its attitude towards a grant is necessarily different from its attitude to its own capital. The latter must be invested and managed to produce the profits that are the basis of its own self-perpetuation and the financial rewards of its owners, the government. The Corporation can take calculated risk with its own capital, risk that will instill a new spirit and open new avenues of enterprise and training for its personnel."

It is indeed understandable that the Government would be concerned to see that its funds are not dissipated on extravagant pension schemes or salaries but these are subject to

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44. Id., ss. 19(3), (4).

45. See D. ALLEYNE "Financial Provisions of State Petroleum Enterprises in Developing Countries" in State Petroleum Enterprise in Development Countries, published for U.N. by Pergamon Press, New York, 1978, 151, p. 158.

sufficient restraint.[46] It is also sensible that any diversion of capital is not arranged through taxation which amounts to a transfer of money from one state institution to another.[47] The state has to provide checks and balances on the operating fund and budget but might not encroach on the entity's financial autonomy.

A public corporation such as the National Petroleum Company has to be independent and autonomous but not sovereign. It should have its own investment fund, working capital and equity base and it is only in this setting that it can expect to flourish.

(d) Control and Accountability

(i) Purpose and Aim

It may seem a contradiction in terms to say that a public corporation has to be controlled after expounding the sensibility in maintaining autonomy and independence. However, there is a need to synchronise the degree of autonomy accorded to it in its financial and administrative operation with the duty of Government to exercise scrutiny and control over its policies and funds. It should be

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46. Nat. Petrol. Co. Act, 1969, ss. 11(2), 12.

47. Under Nat. Petrol. Co. Act, 1969, s. 24, there is only a power given to "exempt it from the payment of any tax imposed by or under any enactment where circumstances so warrant.

remembered that state petroleum enterprises are instruments of the state and derive their budget from the public purse. As a result they should be made answerabe for their actions should they transgress the power given to them in their constituent instrument or deviate from the broader governmental objectives for national economic development. As an instrument of policy, its parameters are circumscribed by the larger state objectives while as a trustee of the peoples' money, it has to abide by rules of financial accountability, budgeting and auditing which have been defined for its use.

It is the aim of accountability to provide a review of the workings, decision-making and profitability of the Corporation. Such investigation is not on a daily basis, for its operational independence must be secured, but rather is an ex post facto query of the operation of the Company at year's end. Control, on the other hand, hinges on the definition of limits so as to prescribe the operational boundaries within the "public interest" of the State and so inherently recognises the hierarchical structure implicit in a government-entity relationship. On a cautionary note, it should be pointed out that there is a danger in excessive control. It may serve to impair business efficiency and to remove the initiative of management by impeding their ability to act independently and decisively.

(ii) Judicial Control

The creation of a "body corporate" without any express statement authorising immunities and privileges for the corporation, aside from a possible exemption from taxation, makes it amenable to the ordinary laws of the land just as any other corporation. In the case of a public corporation the remedies of the prerogative writs are available to anyone who may qualify to bring an action against the entity.

The corporation can be sued, is responsible in crime, tort and contract and also for the wrongful acts of its servants under the rules of agency or vicarious liability. Such status in the eyes of the law is clearly recognised in the landmark case on commercial public corporations where Lord Denning pointed out:[50]

> "In the eye of the law the corporation is its own master and is answerable as fully as any other person or corporation. It is not the Crown and has none of the immunities or privileges of the Crown. Its servants are not civil servants, and its property is not Crown property. It is as much bound by Acts of Parliament as any other subject of the Queen. It is, of course, a public authority and its purposes, no doubt, are public purposes, but it is not a government department nor do its powers fall within the province of government."

Judicial control is largely authorised through the doctrine of ultra vires, the Corporation must keep within

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48. Tamlin v. Hannaford, [1950] 1 K.B. 18, p. 24.

the legal limits of its operation as stated in the Act. In the National Petroleum Company, the powers given are so generous and all encompassing in nature it makes the boundaries for operation almost incapable of limit. Further, a discretionary power is given to[49]

> "enter into all transactions and do all such things (whether or not involving expenditure) as in the opinion of the Board are calculated to facilitate the proper discharge of its function or are incidental or conducive thereto."

Such broad powers serve to render the use of the ultra vires challenge rather nugatory in nature in seeking to restrain corporate action. The increase in powers of discretion to the Board automatically decreases the ambit of judicial control.

Control is also rendered more difficult since state entities are not obliged to act in a fashion where there is a "record", a necessary prerequisite in cases of judicial review. Doubts may also be cast on the justiciability of certain issues which may be within the ambit of Parliamentary rather than judicial review. Since the Minister is allowed to formulate policy in the name of the "public interest" and to give "directions" to the Board, the Courts may, in an action, be shouldered with the responsibility of pronouncing on Ministerial discretion in an area which is

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49. Nat. Petrol. Co. Act, 1969, s. 6(h).

more properly within the domain of Parliament. Hence, ministerial prerogative renders the power of judicial review a not unfettered obligation.

Judicial control is essentially a procedural device for monitoring and checking on the entity. The need to qualify under rules of locus standi has served to minimise and inhibit the exercise of judicial review. While the prerogative writs are available, one may be asked to show a grievance[50] or find the order of mandamus unenforceable due to the widely drafted public duty.[51] These writs have been known to be ineffectual against public corporations.

While judicial control remains largely an ineffective weapon for controlling this entity, either because of ambiguously drafted object clause or insurmountable procedural requirements, ministerial control is a more potent device.

(iii) Ministerial Control

While the National Petroleum Company is not intended to be a government department with a ministerial head for direction and supervision, there is a certain degree of ultimate power given to the Minister in the

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50. See Smith v. London Transport Executive, [1951] 1 All E.R. 667.

51. See R. v. Axbridge R.D.C., ex parte Wormald, [1964] 1 All E.R. 571.

national interest. The Company, being state financed and an instrument of state policy in the petroleum sector must be subject to a degree of control by the appropriate Minister. Under the Act, Ministerial control is exercised over three important areas of operations. These are:

(1) The right to appoint Directors of the Board, the Chairman and General Manager.

(2) A right to limit the exercise of the Board's powers if the national interest so demands and to issue general directives to them.

(3) A right to an approval and veto over certain corporate finance.

Therefore, the Minister has a control over senior management appointments, budget and borrowing and a duty to fulfill a supervisory role over the enterprise.

First, the Minister is endowed with authority to appoint all members of the Board of Directors, which is a policy-oriented body, the Chairman of that Board and the General Manager who "shall be responsible for the administration of the Company."[52] This right is complemented by the power to "revoke the appointment of a director if he deems it "expedient to do so" and where the Chairman, who is appointed from the directors, is not also the General Manager, he retains a right to dismiss the latter as "a condition of his appointment." The control which this form of authority permits is that the Minister is virtually

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52. Nat. Petrol. Co. Act, 1969, ss. 9(1), 9(5).

assured that his appointees would invariably represent the interest of the investor, the state, to whom they owe their appointment.

There are shortcomings in this form of appointment. In the first place, the lack of security of tenure in the appointments means that the Minister can hire and fire senior management as he pleases. Secondly, the appointed Board can be a tool of constant Ministerial interference in the everyday workings of the enterprise and consequently results in a politicising of corporate decision-making. It is necessary to safeguard against these in order to maintain an independent, non-political body which acts as a board of trustees for the power and funds vested in them and which maintains an equilibrium between operational issues and policy matters.

One could suggest a certain approach in this matter. As a means of keeping a check on political interference and arbitrariness, there should be a provision which allows a majority of the Board to overrule the Minister. Since insecurity of tenure and fear of dismissal can be considered a form of covert pressure, Directors and the General Manager should be given contracts of employment with specified heads for dismissal, while a copy of any appointment or dismissal notice should be laid before Parliament. Also, in the appointment of the Board, the Chairman should be selected first and he should then be consulted in the selection of the other appointees. It is,

of course, virtually impossible to expect all safeguards to work properly but at least machinery for checking and balancing could be formulated in the hope of transgressing the shortcomings inherent in appointments based on party politics.

The other area where control can be exercised is in the limiting of the Board's powers through directives issued by the Minister. The Minister has been authorised to:[53]

> "whenever he deems it expedient in the public interest so to do limit the exercise of powers of the Company of such an extent as he may specify ..."

A clause such as this enables the corporate good and well-being to be tied to the "public interest," so corporate decisions are not allowed to operate purely in the sectoral business arena but are incorporated into larger governmental policies and objectives. Further, in the actual performance of its functions under the Act, the Board is made to "comply with the directions of the Minister."[54] Therefore, the Minister is allowed the ultimate control in the national interest, on the exercise of his power. The effect of these clauses is to recognise that Parliament intended the Minister to be the ultimate repository of power and control.

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53. Id., s. 7.

54. Id., s. 17.

In allowing a delimiting of powers granted in the "national interest", recognition is given to the need for the Corporation to act for the public good and welfare and not in the interest of a parochial or circumscribed group or cause. The Minister is given a supervisory role in overseering the Company as the custodian of public funds and property. His directives are intended to transmit to the Board policy pronouncements of the Government so as not to allow deviation from their objective.

Again, there is cause for concern in the powers given to the Minister. The distinction between the objectives and policies of the state and those of the Company and its management appears to be blurred and incapable of exact definition. Consequently, it would be very easy for the Board to override their limits without knowing it and for Ministerial intervention to be warranted. In order for this not to occur, it would be necessary to have constant Ministerial advice and supervision, which is not the intention of the Act. To correct this conceptual vagueness, it is necessary to have a clear guideline and policy breakdown given to the Board with definite pronouncements as to the responsibilities of the Board, the General Manager and in turn their relationship to the Minister. Also, in order not to make the Corporation a mere servant of the Minister, he should be made to "consult" the Board on any directives to be issued, in this way there is an opportunity to explain and have explained the issues involved and their

effects. Directives should be published and recorded, so as to be a formal and documented request capable of enquiry. These changes should provide a more meaningful and independent relationship between the parties and serve to check undue political interference. It also would not make the Board accountable for corporate decisions made by the Minister.

The third area where ministerial control is exercised concerns borrowing powers and budget approval. While these would be discussed in more detail under the following heading, they would be briefly looked at to show the intention of Parliament. The Minister is asked to approve an annual budget for the Company[55] and also to be presented with an annual financial report of the Company's operations.[56] If looked at together, this allows the Minister a review of the Company's financial practices for the past year and so provide a basis for his judgment in approving future expenses in the coming year. It is he who ultimately sanctions the giving of finances from the public purse and it is such veto control which suggests that Parliament intended the Company to be faithful to its expenditure obligations. The Minister of Finance is allowed by the legislation a power to approve borrowing in certain important areas, including provision of working capital, share acquisition and the creation of subsidiaries. This makes

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55. Id., ss. 19(3), (4).

56. Id., s. 25.

him the one who controls the extent of loan capital authorised and who also guarantees such loans. It is inevitable that since such large sums come from the treasury, the responsible Minister should be the Finance Minister. The intention is to implicitly authorise a review of projects in the name of the national interest and its financial capability.

(iv) Financial Control

State financing necessarily carries with it state control. The National Petroleum Company derives its total capital from the state or state authorised loans and it is imperative that a measure of control and accountability be exercised. The intention of such control is to monitor the allocation and use of such resources in order to deter any financial malpractices. In the act which establishes the Company, financial control is exercised through approval requirements, reporting obligations, auditing and the general power of supervision and appointment which the Minister exercises.

One of the most secure forms of control is for the state to appoint a financial expert to the Board of Directors. The Board which deals with the formulation of policy for the Company can seek the financial advice of such a director in matters relating to accounting, budgeting and corporate planning. In contemplation of such an appointee,

the Act authorises a person trained in "accountancy, economics or finance" to be appointed.

Perhaps the strongest control over the Company is exercised in the area of budget approval. The Act requests that:[57]

> "(3) Not later than three months prior to the end of each financial year the General Manager shall prepare and present to the Board and the Board shall consider the operations budget of the Company for the next subsequent financial year.
>
> (4) The Board shall as soon as possible after this submit the budget with their comments to the Minister for his approval."

This means that the operation's budget together with the Board's views of it, are to be presented annually for approval by the Minister. A right of approval means that there is a power to refuse to sanction the presented budget. In arriving at his decision, the Minister has before him the facts necessary for undertaking a review and examination of the Company's proposals for the coming year. Therefore, such a requirement allows the Minister a power of review of the plans together with a correlative right to refuse or conditionally accept expenditure for such undertakings.

It would appear that this form of control is not infallible. Budgets can be very skeletal or can present a

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57. Id., ss. 19(3), (4).

complete financial picture of an entity. As a means of strengthening such control, the Company should be made to submit specific information which should include revenue and expenditure statements which show both recurrent and capital items, cash and financial resources, investment of funds and other relevant information desired. In this sense, it should go beyond a mere statement of proposed expenditures as quantified in a lump sum statement.

Besides the budget, the Company can also obtain money through its powers of borrowing and reinvested surpluses. As outlined earlier, the prior approval of the Minister of Finance is required in borrowing money for inter alia, working capital, establishment of subsidiaries and acquisition of shares or other interest while loan guarantees are paid out of the Consolidated Fund, formed with taxpayer money. Therefore, the Company has to justify its borrowing to the Minister of Finance who has the final say in deciding whether or not a transaction is to be financed. Reinvested surplus in the form of profits are also controlled by the state for they are immediately returned to the "national funds" unless the Minister of Finance makes a partial re-allocation to the Company. What is evident is that Ministerial discretion is to be exercised at every point where there is a capital input to the Company.

There are also checks on money after it has been authorised to the Company and these are checks not on the allocation of funds but rather on its use. Annual reporting and budgeting requirements are the two devices used in achieving this end. The Act calls upon the Board to present an annual financial statement to the Minister, as it states in its own words:[58]

> "Not later than the end of the third month of each financial year a report on the operations of the Company during the last preceding financial year shall be submitted by the Board to the Minister and such report shall be laid before Parliament."

It is intended in such reporting to obtain a clear picture of how the Company sees its own financial affairs and accounts for its corporate decisions. However, such documents can be self-serving in nature and a means whereby management is able to camouflage its financial malpractices. Its value lies in the information which is documented and so there should be a clear statement of what is required by the state, this decision should not be left entirely to management. The potency of an ex post facto inquiry lies in its ability to expose and it is self-evident that no Board would seek to incriminate itself in the event of any wrongdoing.

The final form of fiscal control is exercised through an audit which is a review of the financial,

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58. Id., s. 25.

accounting and other actions of the entity. An audit is expressly authorised under the Act which states:[59]

> "The accounts of the Company shall be audited by the auditors appointed by the Board and approved by the Minister after consideration of the advice of the Director of Audit. Such accounts together with any report made shall be submitted to the Minister within one month of completion ...".

The reason for an audit of this nature is to examine the financial proprietary of the officers and their managerial decisions. Also, it seeks to determine whether the financial expectations of the state are being pursued and the procedural rules for finance and accounting are abided by. Such investigation is the prerogative of the state, it ensures that allocated sums are used for allocated purposes and in reminding officers of the Company that their activities would be investigated at some point.

The Act is not entirely clear as to the type of audit which is to be conducted. It is definite that external auditors would conduct the examination for no internal auditors are appointed by the legislation nor is the Auditor General given power to audit. There is no mention that the audit should be a commercial one and this should be spelt out clearly. It is understandable that the Auditor General is "asked to give advice" in the selection of an auditor for he is the custodian of Government funds. Since

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59. Id., s. 30.

loan guarantees are authorised out of the Consolidated Fund, his approval would amount to a recognition of the auditing of what is part of government expenditures, which comes under his department.

The aim of financial, like ministerial control is to provide information for parliamentary inquiry so one has to look at its adequacy in terms of the parliamentary process. The Act does not clearly and adequately enunciate the type of information which is required in the auditor's report. It is, for example, possible for auditors to dwell on procedural irregularities without giving an adequate overall financial picture of efficiency, performance, cost effectiveness and plan implementation. In this sense, one can find the U.S. position instructive for its request that reports going to Congress should contain[60]

> "statement (showing intercorporate relations)of assets and liabilities, capital and surplus or deficit; a statement of income and expenses; a statement of source and application of funds; and such other comments and information as may be deemed necessary to keep Congress informed of the operations ... together with such recommendations with respect thereto."

The test of the efficiency of the audit is one that seeks "to keep Congress informed of the operations". It is designed for a parliamentary response.

In the same way, a requirement should be established to seek information necessary to allow fruitful and

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60. See Organisation, Management and Supervision of Public Enterprises in Developing Countries, U.N. Doc. ST/TAO/M/65, p. 118, para. 327.

constructive debate on state enterprises. The legality and regularity of expenditure, financial performance, profit and loss account, cost effectiveness and the achievement of set objectives should all be disclosed to the representatives of the taxpayers. Such important disclosures should not be breached due to lack of definition by the law.

(f) Conclusion

The parliamentary control process would be discussed in detail when dealing with TRINTOC in the next section, since the Constitution has now provided a procedure of review for all state enterprises.[61]

Clearly, in the case of the National Petroleum Company, there are widely drafted provisions which can only be properly reviewed when at work. The law which establishes this Company has the makings of a workable petroleum enterprise which would balance the control of management and policy with the operational flexibility necessary for commercial pursuit. However, as outlined in suggested reforms, there is a need for adjustments in the structure especially in establishing financial autonomy. A need also exists for amalgamating correlative industrial undertakings under the umbrella of this Company so as to constitute a proper holding, as well as operating company, which would

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61. Constitution Act, 1976, s. 116.

supervise and co-ordinate operations of attendant subsidiary interest. Those, however, would be discussed in the last section dealing with proposals for reform.

NATIONAL PETROLEUM COMPANY (T.T.)

TABLE VI: Diagramatic Illustration of Control and Accountability Mechanism*

Item	Approval/Appointing/ Control BODY	Qualification/ Restriction
1) Appointment of Directors	Minister of Energy	Subject to selection from categories stated in the Act
2) Appointment of Managing Director/ Chairman of Board	Minister of Energy	"
3) Borrowing/ Loan	Minister of Finance/ Min. of Finance guarantee	Temporary overdraft allowed by Company management
4) Disposal of Profit/ Dividend	Minister of Energy/ Minister of Finance	Part to "Natinonal Funds"
5) Auditing	Board of Directors	(1) Subject to "advice" of Director of Audit. (2) Submission of report to Minister
6) Budget	Approval of Minister of Energy	(1) Subject to Preparation by General Manager (2) Consideration and comments by Board
7) Accounts/ Annual Report	Board of Directors	(1) Submitted to Minister (2) Laid Before Parliament
8) Approval of Projects	Board of Directors/ Management	Subject to "direction" and "public interest"

*Some of the headings used in this Chart were taken from Organisation, Management, Supervision of Public Enterprises in Developing Countries, U.N. Doc./ST/TAO/M/65, pp. 95-96.

Item	Approval/Appointing/ Control BODY	Qualification/ Restriction
9) Appointment Managerial	Board of Directors	Approval of Minister of salaries per $12,000 per year
10) Pension Fund/ Provident Scheme	Board of Directors	President's approval and direction as to terms and conditions
11) Creation of Reserves	Min. of Energy	

Source: Compiled by author.

2. Trinidad and Tobago Oil Company

Introduction

The Trinidad and Tobago Oil Company, TRINTOC, was formed as a result of the take-over by the Government of the entire share capital of Shell Trinidad Ltd. from the Royal Dutch/Shell Group. This nationalisation, accomplished on August 31st 1974, which commemorated the nation's twelfth anniversary of independence, meant a transfer of marine and land leases for the exploration and production of petroleum, a refinery, marketing outlets nationally and internationally plus the physical infrastructure which was ancillary to the Company's operations. Altogether, the state purchased the entire issued share capital consisting of six million ordinary shares for a total cost of £19,500,000.[62]

There is need at this point to clearly explain the economic setting in which the Company operates and the position of the state. Such an inherited legacy allowed the state an opportunity to own and operate an entire petroleum producing and refining company and to commence, in a small way, indigenous operations in the area. In terms of acquisition, production of crude oil was biased in favour of marine output which totalled 17,275 b.o.p.d. while land operations yielded 7,072 b.o.p.d. The refinery

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62. See Heads of Agreement between Govt. of Trinidad and Tobago and Shell Overseas Holding Ltd, s. 2(11).

consisted largely of machinery constructed before 1950, it included a crude distiller for processing all heavy crude, a platforming unit, hydrotreater and hydrogenerator and a high vacuum unit for manufacture of bitumen. It was designed to process local crude originating under its own leases and its foreign crude originating from Nigeria and also those of British Petroleum under a cross processing agreement. The products which were produced consisted of motor gasoline, platformate, light distillate fuel, gas oil, bitumen, liquified petroleum gas and residual fuel oil. Fuel oil accounted for some three quarters of the produce and was destined for markets in the Eastern United States although some regional markets in the Eastern Caribbean and the Guianas were also serviced. Local demand, although minimal at the time, was largely for domestic and industrial fuels, automative requirements, bitumen for road surfacing and some chemicals. Clearly, the continued profitability of the Company hinged on its sales of fuel oil to the United States and a supply of foreign crude from Shell's overseas operations. Without these, its operations in Trinidad were unprofitable and anomalous.

In its present position, the fragility of the Company and the inherited legacy is becoming apparent. In the first place, old operations were acquired which produced a product, fuel oil, which was a low revenue earner since higher valued products were produced at Shell's other Caribbean refinery in Curacao. A recently diminishing

market in the U.S. for fuel oil meant that the refinery operations needed upgrading[63] in order to produce higher grade products. Additionally, the enhanced financial position and profitability afforded by increased oil prices is starting to erode, and this slowly diminishes its capital basis of operations. Last but not least, the "adjunct" dependency character of the local operations to the global Shell operations is becoming apparent. Local operations needs the Shell infrastructure, for now, there are fewer market prospects in the U.S., less foreign oil for refining and no Curacao refinery absorption for higher refining. Although these trends were noticeable sometime ago, the lack of long-term planning and the unwise decision of purchasing an obsolete and "adjunct" operation is only now becoming evident. TRINTOC appears to be a company in decline or one to be supported through a large state infusion of capital.

In giving this outline of the Company's acquisition and future prospects, it was intended to provide the general economic environment in which it operates so as to understand more fully its need for funding, direction and control which would be examined in the ensuing discussions.

(a) <u>Status and Assets</u>

TRINTOC is a limited liability Company registered

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63. TRINTOC is presently asking the Government for 1 billion dollars to do this.

under the company law of the country. It is limited by shares and is a body corporate which can sue and be sued in addition to having perpetual succession. Its shareholders consist of the Minister of Finance as the majority and the directors on formation, all of whom hold interest on behalf of the state. Not being given immunity status, the Company remains subject to the laws of the country including the Petroleum Taxes Act, 1974, Petroleum Act, 1969 and Petroleum Regulations, 1970, all of which apply to private sector companies operating with petroleum and commercial interest. Such mutual co-existence reaffirms the policy of a mixed economy where public and private interest exist alongside.

TRINTOC, the Company incorporated under the local company law, is the parent company of the Trinidad and Tobago Oil Co. Ltd. incorporated under British law. The reason for this somewhat anomalous situation is that the take-over of Shell Trinidad Ltd. meant a change in the name of the Company but not a change in its incorporation. In effect, a local company was formed with the intention[64]

> "to acquire and take over the undertakings of Trinidad and Tobago Oil Company Ltd. incorporated in the U.K. and with a view thereto to acquire all or any of the shares, debts and liabilities of that Company."

The U.K. registered company is a subsidiary of the locally incorporated company. It is entirely unclear why this

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64. Memo and Articles of Assoc, TRINTOC, s. 3(111)(a).

situation should exist for no trade is done by the U.K. subsidiary while the requirements of its company law demand compliance with a completely different set of principles.[65] Indeed, such incongruity appears anomalous.

The decision to incorporate TRINTOC under the local company law rather than constituting it as an entity by act of parliament should be looked at. A fundamental weakness with this type of approach is that the company law, without the necessary amendments for accountability,[66] is not designed for the public corporation but rather for private sector business. A public corporation has no shareholder or shares in the real sense of the word and, as is evident in TRINTOC, the putative shareholders also constitute the Board of Directors. Hence the separation of management and membership which exists in a private limited liability company does not exist. Indeed this serves to render nugatory fundamental aspects of the company law dealing with such matters as meetings, minority shareholders rights, control of directors and their interest by the general meeting and principles relating to the raising and maintenance of capital. Moreover, without such checks on the directors, there has not been an attempt to invest the

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65. An example would be the disclosure requirements under the Companies Act of 1967, ss. 6, 7. Aslo s. 14(1) of the Companies Act 1976 may not be reconcilable with the Constitution Act, 1976, s. 116, the Republican Constitution.

66. India in bringing public corporations under their company law made substantial amendments to the Indian Companies Act, 1956 to create rules of accountability.

Minister, as the General meeting, with any real and significant power for control. Consequently, the Minister cannot be held to be an instrument of public accountability.

Aside from the doctrinal arguments advanced against this type of structuring, it is doubtful whether it was intended in the first instance. The take-over of Shell appears to have been more an act in honour of nationalistic pride rather than one based on economic expediency. It would seem that there was no deliberate policy to incorporate TRINTOC under the Companies Act but it was simply more convenient to do so. This procedure did not entail any delay as the parliamentary process would have involved, had an act been used. Also, since the National Petroleum Company already existed on the statute books, there was no need to create another company to do the same work. It is reasonable to assume that TRINTOC was intended as a subsidiary of this Company.

The use of this approach meant there was never an opportunity in Parliament to debate and amend the charter and constitution of TRINTOC. Relations were governed by a purely internal document, the Articles of Association, and no clear thinking of the role of the Board, Minister and management is evident. Ministerial directing and prescribing power in the public interest is minimal and so parliamentary review is circumscribed. Therefore, one can say that TRINTOC was formed essentially to manage and operate the affairs of the Shell Company rather than to

serve and function as a national petroleum company. However, it has been the recipient of state funding and assets as is characteristic of a national enterprise.

As a result of being a wholly owned government enterprise, the finances and assets of the Company would be provided by state owned revenue bearing assets, loan funding or issued capital. The authorised share capital is 125 million dollars while the issued share capital is made up of 28,800,000 ordinary stock in units of £1 (T.T. $4:80) each. The Government has also provided loan capital to the Company in the sum of 40 million (U.S.) dollars at 8½% interest since 1974, because of "indebtedness and the substantial increase in funds required to finance stocks in oil, trade receivables and capital expenditure."[67] This was classified as long-term borrowing. Funds were also raised through short-term debts resulting from overdraft borrowing in the sum of 61,279,534 dollars and a loan note of 60,000,00 dollars in 1978, with the rate of interest on foreign bank overdraft at 15:75% and 10% on the local banks. A line of credit of 134 million dollars was also authorised[68] to provide working capital. A major source of capital financing was provided by the non-declaration of dividends and the retention of earnings, due to the "high

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67. Trintoc Annual Report, 1974, p. 16.

68. See Trintoc Annual Report, 1978, pp. 30-31 and Annual Report, 1979, p. 32.

level of capital and exploration expenditure foreseen,"[69] for reinvestment purposes. Hence, the capitalisation of sums necessary for operation has come from the domestic and international money market, retained surpluses, state loan funding and its largely paid up capital. The state as can be seen, has poured large sums into the Company.

In addition to capital contributions and guarantees TRINTOC has also been able to benefit from long-term revenue bearing assets. The Company operates as a repository for certain of the state's rights and interest in leases and consortium agreements. Presently, the Company has three joint venture and two wholly owned leases. Interest in the joint venture leases consists of a one-third share in the Trinidad Northern Area Ltd. lease off the South-West Coast, a one-sixth share in the North Marine Lease off the South-West Coast and a 50% share in the South-East Coast Consortium. The latter agreement is a Participation Agreement between the Government, Texaco Trinidad Inc. and Trinidad-Tesoro whereby the state had an option to increase its share from 37½% to 50% in the event of a commercial discovery, which took place in 1977. Such an endowment to TRINTOC served to augment the capital reserve of the Company[70] and also to hold in abeyance the large supplies

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69. Trintoc Annual Report, 1979, p. 4.

70. See Anuual Report, 1979, p. 32. Capital reserve stood at $13,926,615 at that time.

of natural gas existing in this area. In allocating these state interests to TRINTOC, it is becoming the beneficiary of assets in the ground which in 1977 amounted to proven reserves of 90 million barrels of oil and 82 million cubic feet of gas.[71]

Therefore, the state has provided the major share of the loan and equity share of the Company. Fortunately, the enhanced petroleum prices and an increase in domestic production has helped to keep the Company buoyant and yielding a rate of return on invested capital in the sum of 20%.[72] As a locally incorporated company its obligations to petroleum taxes have also provided a "dividend" to government.[73] In the sense of being a purely commercial company created for profit motives it has been successful and this form has allowed considerable flexibility and freedom to the management. However, there is need for more checks and balances especially in the period of financial austerity which is apparent ahead.

(b) Powers and Function

TRINTOC was formed as a commercial and investment

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71. Trintoc Annual Report, 1977, p. 38.

72. See Trintoc Annual Report, 1977, p. 3.

73. Taxation payable amounted to 1976: $128,714,000; 1977: $142,663,000; 1978: $134,291,000; 1979: $168,870,000.

corporation for the purpose of making profit. However, its powers are specifically aimed at operations in the petroleum sector. It admits in its annual report that it engages in[74]

> "integrated petroleum operations which cover exploring for and producing crude oil and natural gas, refining of crude oil and manufacturing of petroleum products, and international marketing of petroleum products."

Consequently, one is able to identify two sets of powers, those which are primary and directive and which authorise activities in the petroleum sector and others which are attendant, but equally important, in enabling the Company to exist as a commercial entity with profit and investment monies. In giving powers for its primary responsibility, the petroleum sector, TRINTOC is authorised to, inter alia,[75]

> "1. to carry on in all or any one or more of its branches the business of producing, refining, storing, transporting, supplying, selling and distributing petroleum and other oils and any products thereof.

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74. Trintoc Annual Report, 1979, p. 1. See also Annual Report, 1977, p. 6 which lists its "principal activities" as those "to explore for, produce, manufacture, buy and sell petroleum and otherwise deal in crude oil and petroleum products."

75. Memo and Articles of Association, TRINTOC, ss. 3(v), (viii), (xv).

2. To purchase, take on lease or licence or otherwise acquire any petroleum or oil bearing lands or any interest in any such lands, or any rights of or connected with the getting or mining of any petroleum or other oil, and to sink wells, to make borings, and otherwise to search for and get petroleum and other oils and the products thereof.

3. To enter into partnership or any arrangement for sharing profit, unions of interest, co-operation, joint adventure, reciprocal concessions, or otherwise with any company, body or person engaged in, ... in any business or transaction which this Company is authorised to carry on or engage in."

Because of the widely drafted provisions, the Company does not appear to be enjoined from pursuing particular courses, such as operating outside of the country, contracting with foreigners or from seeking contracts other than porduction-sharig agreements. Again, the powers are too far-reaching and unchecked for it is important that they are employed in a "manner and form" prescribed by the state.[76] The state could well achieve this by expressly making company operations subject to state policy and objectives.

In the exercise of its attendant powers which are designed to allow commercial and business pursuits, TRINTOC has again been given wide powers. These include, inter alia, the right.[77]

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76. See, for example, IRAQ, Law No. 97 of 1967, s. 3:3 which prohibits certain types of contracts and concessions.

77. TRINTOC Memo and Articles of Association, ss. 3(ii), (iv), (xix), (xxii).

"1. To acquire any such shares, stocks, debentures, debenture stock, bonds, notes, obligations or securities ...

2. To establish companies and associations for the prosecution or execution of undertakings, works, projects, or enterprises of any description ...

3. Generally to purchase, take on lease, or exchange, hire, or otherwise acquire any real and personal property, and any rights or privileges which the Company may think necessary or convenient for the purpose of its business ...

4. To borrow or raise or secure the payment of money in such manner as the Company shall think fit ...

5. To invest and deal with the monies of the Company not immediately requiring investments in such manner as may from time to time be determined."

There is reason for concern in that these powers are unconditional. In the case of borrowing, in view of the fact that there is no established debt-equity ratio and debt servicing can be an expensive commitment, a prior approval formula should be used. The only restriction on borrowing by a limited liability company is that it must be for an intra vires transaction.[78] Also, the right to invest and deal with the surplus corporate finances could be the subject of some direction such as the creation of reserves or as a subscription to unpaid capital.[79]

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78. See Introductions Ltd. v. National Provincial Bank, [1969] 2 W.L.R. 291 (C.A.).

79. See, for example, Indonesia Reg. No. 27 of 20 Aug. 1968 establishing Pertimina, Art. 18 and IRAQ, Law 123 of 4 Sept. 1967 establishing INOC, Art. 5(1). The (contd.)

TRINTOC is clothed with the necessary power in order to function in the petroleum sector. However, it does not appear to be under an obligation to abide by state policy. A resident directive power is not retained by the Minister,policy perameters are not defined and prior approval before acting is not required in important areas. This approach is not advisable.

(c) Management

TRINTOC, being registered under the company law of the land, is structured in its Articles of Association as a company so incorporated and has the respective organs of that entity. There is a Board of Directors, Managing Director, General Manager, Secretary and General Meeting of shareholders.

The Board of Directors, which comprises between five and ten members is appointed by a majority of the shareholders, which is the Minister of Finance. Their remuneration is also fixed by the general meeting and they can only be removed for stated reasons including, inter alia, bankruptcy and unsoundness of mind although the Company, by extraordinary resolution, can also terminate such

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investment of surplus money is an intrinsic part of a commercial company's operation. In TRINTOC retained earnings have been largely used for reinvestment, small investments in associated companies and exploratory work in the field of seismic re-interpretation. See Trintoc Annual Report, 1979, p. 11.

appointment. After the initial directors are appointed, the Board of Directors is also given power to appoint directors once the maximum number of appointees has not been exceeded.[80] It is evident, that there is no prescription as to the qualifications necessary in the selection of directorial personnel and a completely unfettered power of selection is given to the Minister.[81] Also, the power of dimissal is made more difficult since the heads of dismissal are prescribed. However, the power of the Minister has been fettered in a fundamental way in the giving of a power to appoint directors to the Board itself, for this is usually understood as one of the most important means of control exercisable by the Minister.

In the allocation of power, the Board of Directors has been given wide and unfettered powers of management with little or no reservation to the Minister, as represented at the General Meeting. The Directors are given power for[82]

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80. Memo. and Articles of Association, s. 92, see also s. 91, 79-82.

81. Presently, the Chairman of the Board is a former diplomat, the other members include, a civil servant, a businessman, the General Manager of the Company and the the Managing Director of the National Petroleum Marketing Co.

82. TRINTOC, Memo and Articles of Association, s. 110.

> "The management of the business of the Company ... in addition to the powers and authorities by these presents expressly conferred upon them, may exercise all such power and do all such acts and things as may be exercised or done by the Company and are not hereby or by statute directed or required to be exercised or done by the Company in General Meeting, but subject nevertheless to the provisions of the Statutes and of these presents and to any regulation from time to time made by the Company in General Meeting, provided that no such regulation shall invalidate any prior act of the Directors which would have been valid if such regulation had not been made."

The total effect of such a provision is that the General Meeting is not allowed to interfere with any decisions of the directors unless they are invalid. The General Meeting cannot give directions on the conducting of the management of the Company nor in fact are they allowed to overrule any decisions taken in the conduct of business. Even matters which have not been expressly given to the directors are still within their power providing the General Meeting has not expressly reserved such power for itself.[83] In view of the fact that the General Meeting has not expressly reserved the power to give directions, specific or general, nor reserved any important corporate powers to itself, the Board remains free of Ministerial control and direction. However, the Board remains subject to the overriding

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83. See Quin and Axton v. Salmon, [1909] 1 Ch. 311 (C.A.); [1909] A.C. 442 (H.L); Shaw & Sons (Salford) Ltd. v. Shaw, [1935] 2 K.B. 113 (C.A.), per Greer L.J. p. 134 and Scott v. Scott, [1943] 1 All E.R. 582.

common law obligation to act bona fide in the interest of the Company and to exercise their powers for the purpose for which it was conferred.[84]

The directors' powers of management are those normally entrusted to officers in that position. They include the power to borrow and lend money, to deal with surplus capital, creation of reserve funds and the capitalisation of profits and the power to raise and secure payment to the Company. The financial liquidity of the Company is placed in their hands. In addition, the organisational structure and general administration of the Company is given to them.[85] Consequently, management involves both a financial and administrative responsibility and in fulfilling the latter a discretion to create services and employ personnel for, inter alia, marketing, exploration, production, legal and manufacturing operations in a petroleum industry.[86]

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84. See Re Roith Ltd., [1967] 1 W.L.R. 432.

85. TRINTOC, Memo and Articles of Assoc. S. 111 (v):
"To appoint and at their discretion remove or suspend such managers, secretaries, officers, clerks, agents and servants for permanent, temporary or special services, as they may from time to time see fit and to determine their duties and powers and fix their salaries or emoluments, and to require security in such instances and to such amounts as they think fit."

86. TRINTOC has 1,023 employees with six divisional managers, two overall co-ordinators and a General Manager. See TRINTOC Annual Report, 1979, pp. 18, 40.

The General Meeting of shareholders has two sources of power, those expressly reserved and those residual powers upheld by law. Those expressly reserved are in the nature of those transacted annually such as the declaration of dividends, consideration of accounts, directors and auditors reports, the appointment of directors and the fixing of their remuneration.[87] In this sense, the Minister's role is relegated to an annual query in a general meeting rather than a continuing one to direct. The more important control remains the right to amend the articles of association so as to restrain directors powers or to remove directors completely. Such deterrent powers are usually resorted to in cases of serious misconduct and there is no evidence of such to date. The General Meeting has played a largely passive role and restricted its involvement in TRINTOC to providing financial support.

The other main functionaries in the Company are the Managing Director, General Manager and Corporate Secretary. The Managing Director is appointed "for such terms and at such remuneration" as decided by his fellow directors. His position shall cease if he is no longer a director or if "the company in general meeting resolve that his tenure of office as managing director or manager be determined".[88] This is a largely ceremonial position occupied by a former

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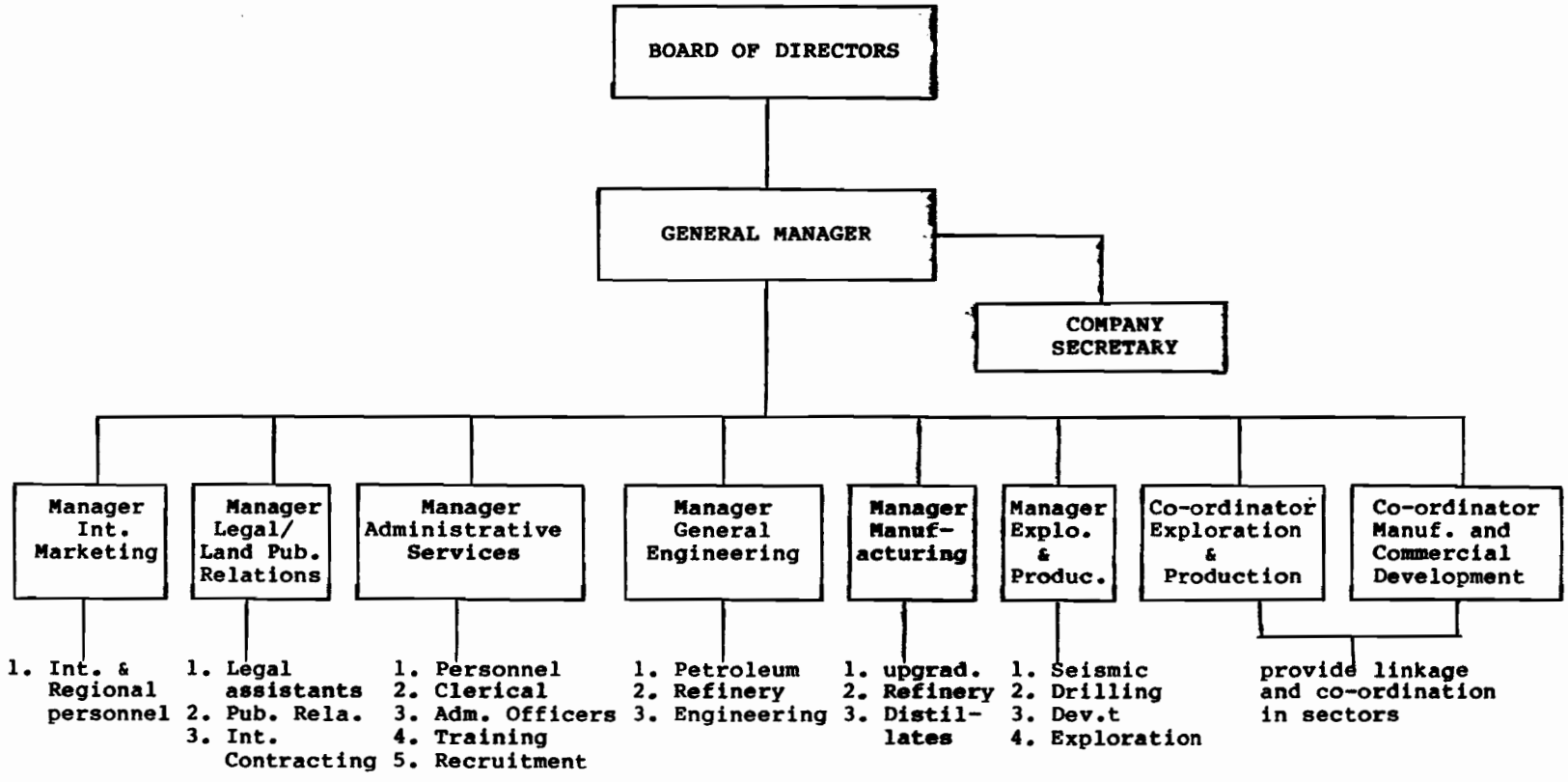
89. TRINTOC, Memo and Articles of Association, s. 57.
90. TRINTOC, Memo and Articles of Association, s. 73.

diplomat who is inexperienced in petroleum issues. Consequently, much of the Company's operations have been entrusted to the General Manager. The Board of Directors has played a mininal role in the Company which has been directed by its senior management. Legally, however, they are to exercise their functions in accordance with orders and instructions given. A company secretary, in this case the legal advisor, is also appointed to act in an administrative manner and to overseer that the documentation as required by law are abided by.

The management structure is built around the model of private companies which operates on the basis of a delegation of power. Directors are entrusted with the management of affairs almost to the total exclusion of the Minister. In the daily implementation of objectives there is a senior management group who are under the jurisdiction of the Board. In actual fact, it is this group which has largely been responsible for the direction of the Company since the Board act mainly on their advice of the formulation of their policies.

TABLE VII: ORGANISATIONAL CHART OF TRINTOC'S MANAGEMENT



Source: Compiled by Author.

(d) Accountability

Accountability instills a measure of control and discipline on a company. It fulfills the purpose of assessing the quality of management by reviewing corporate planning and decision-making and demands a sense of financial propriety, for management act in the knowledge that their action would be reviewed.

The accountability obligations of TRINTOC is largely the task of three bodies; Parliament, the Auditor General's Department and the Public Accounts (Enterprises) Committee. Because of the omission to expressly delegate a power of direction to the Minister and the inherent shortcomings of the company law in prescribing a formula for control of a public corporation, the Minister remains unaccountable to Parliament for the actions of TRINTOC, except in so far as he prescribes broad energy policy. In essence, TRINTOC appears totally responsible in defining its own modus operandi and is accountable only at year's end.

Public accountability means accountability to Parliament. In Trinidad, such answering is made a constitutional duty of state enterprises. In the method prescribed, it takes a two stage process with the Auditor General first being allowed a query and secondly, these audited reports are laid in Parliament. The Auditor General has an important role to play since he is[89]

> "... hereby empowered to carry out audits of the accounts, balance sheets and other financial statements of all enterprises that are owned or controlled by or on behalf of the State."[90]

On completion of the annual audit, it is then submitted to the Speaker of the House of Representatives, President of the Senate and the Minister of Finance. This completes the obligation on the Auditor General. However, the Speaker and President of the Senate have to[91]

> "cause the report to be laid before the Senate and House of Representatives, respectively, at the next sitting of the Senate and House of Representatives after the receipt thereof, respectively."

Surprisingly, the obligation to the Senate and House of Representatives is simply the laying of audited reports before its sitting. Inquiry then takes the form of a question period, general debates, debates on motions and the budget. However, the severity of time limits imposed on these debates and the elaborate procedural requirements on

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90. "Controlled by or on behalf of the State" is taken to mean "... if the Government or any body controlled by the Government or any body controlled by the Government:
    (a) exercises or is entitled to exercise control directly or indirectly over the affairs of the enterprise;
    (b) is entitled to appoint a majority of the directors of the Board of Directors of the enterprise, or;
    (c) holds at least fifty per cent of the ordinary share capital of the enterprise,

    as the case may be". Constitution Act, 1976, s. 119 (9).

91. Id., s. 116 (5).

the House has rendered discussion minimal. Indeed, the parliamentary debates reveal a dearth of discussion on TRINTOC itself although state policy in the energy sector has been the subject of debate. In reality, the parliamentary inquiry is most effective when the Minister can be held accountable for the affairs of the company but this is not possible if he is given no legal powers for its direction.[92] A contributory reason for the lack of skillful and complete questioning is that parliamentarians may not have a thorough understanding of the industry. Also the position of Member of Parliament is a part-time one and so does not permit adequate study of the subject. Nevertheless, it is submitted that under the present structural form, parliamentary control is ineffective without ministerial responsibility since it is necessarily an investigation into executive action under their control.

The parliamentary process has benefitted from the establishment of a Public Accounts (Enterprises) Committee which is the equivalent of a parliamentary select committee on nationalised industries. It is authorised to be created by the Constitution and consists of six to ten members who shall be appointed by and from the Senate. The Chairman is to be an opposition member. A duty is created on the body to "consider and report" to the House of Representatives

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92. The Minister of Energy, Finance and State Enterprises are the custodians of petroleum sectoral policies with the latter Minister directly responsible for TRINTOC.

on[93]

> "(a) the audited accounts, balance sheets and other financial statements of enterprises that are owned or controlled by or on behalf of the State; and
>
> (b) the Auditor General's report on any such accounts, balance sheets and other financial statements."

The reasons for this body are obviously very well-intentioned ones and the reports of the Public Accounts Committee are given wide coverage in local newspapers and reports to the public. However, for a satisfactory compliance with its mandate there is need for annual reports and financial statements to be issued and audited. There has been significant defaulting and delaying in the submission of these reports which has rendered inquiry into TRINTOC, by this body, totally ineffective. Even if now submitted soon, such an ex post facto query would be rendered too late to be of any value and indictments would be phyrrhic in nature.

The third body with responsibility for investigating the Company's affairs is the Auditor General. As a means of securing an independent status, he is appointed under the Constitution and holds his office and duties under powers given thereunder.[94] As outlined earlier, he

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93. Id., s. 119 (8).

94. Id., ss. 116 (6), 117 (1), (3).

is to audit the accounts of state-owned companies and provide the audit reports to designated officers of the Parliament. The choice of the Auditor General adds constitutional legitimacy to the inquiry since the assets of the Company are part of Government's funds and sums allocated constitute Government expenditure which are rightfully within the domain of the Auditor General's investigative powers. An inquiry into government business by the Auditor General, who is familar with state procedure and standards, would facilitate a scrutiny which is in the interest of the state.

In spite of the honourable motives in appointing the Auditor General to investigate TRINTOC, the more important issue is the question of the type of audit conducted and the capacity to undertake such questioning. TRINTOC's annual report testified that the examination conducted showed a "true and fair view of the Company's state of affairs."[95] This is used to describe a commercial audit which is not a mere fault finding inquiry into procedural regularities but rather an evaluation of management practices, accounting principles, profitability and managerial decision-making. Its purpose is obvious in a company which ———————————

95. In the exact words of the report the examination included:
"a general review of the accounting records and supporting evidence as was considered necessary. The statements ... are properly drawn up in accordance with general accepted accounting principles applied on a basis consistent with that of the preceding year and exhibit a true and fair view of the state of affairs of the Company ...".

lacks shareholder inquiry. It is a means of stimulating growth and efficiency.

The capacity of the Auditor General to carry out such an audit in a petroleum company is clearly in doubt. A recently created "Oil Audit" section lacks the trained manpower to adjudicate adequately on the technical and commercial aspects of petroleum operations and to probe into management decisions.[96] The relationship which has developed is not that of a "client" but rather of one government department to another. Moreover, the annual reports needed for auditing are not annual in their submission. There remains no record for examination in order to determine if reports of million dollars losses of the Company are true or false.[97] While this inefficiency reduces the capacity of the Auditor General to do his work, it raises suspicion that it may be a convenient cover for delaying the process in the light of bad performances and in publishing a record of activities long after they have taken place and are harmless in nature.

In assessing the Company, the only yardstick of success which seems to have been used is corporate profitability. This conclusion is arrived at after looking at the format of the annual report and the accounting system

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96. Interview with official of "Oil Audit", Ministry of Finance.

97. See Express Newspaper, "No $M. Losses at TRINTOC for '82", Sunday 7 Nov. 1982, p. 21

used in realising the information upon which an assessment of the Company is made. It is stated that the rules of "generally accepted accounting principles"[98] are used and also those which "conform to United Kingdom generally accepted accounting principles".[99] These principles of accounting are used in deciding commercial profitability. As further support for this view, one can look at the annual report itself. It is divided into three basic parts; prose, pictures and figures. The prose states the highlights of the year, a report of the directors and a general review of corporate, operations and financial matters. The figures give, inter alia, income and balance sheets, profit and loss account, source and application of funds and footnotes to the financial statements which give the facts behind the figures. The pictures are the only media for showing the Company at work in a community and national environment. It is clear that profitability is taken as the cornerstone of success and all information provided to the auditors seeks this type of appraisal.

It is suggested that a national petroleum entity should be evaluated as a success or failure on issues other than only corporate profit. A more appropriate formula would be for the state to specify a certain minimum rate of return on investment which guarantees financial buoyancy.

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98. TRINTOC Annual Report, 1978, p. 26.

99. TRINTOC Annual Report, 1979, p. 29.

Other than this, certain intangible benefits, such as the development of a national petroleum capability and the reduction in the dependence of foreign capital among others, could be considered in the annual reports.

Conclusion

TRINTOC as a state company is in need of a legal restructuring. It has been the vehicle for mobilising the entrepreneurial efforts of the state in the petroleum sector and consequently certain powers of the Ministry of Energy have been "hive off" to it. As a result it has been the recipient of state rights and funds and it is imperative that its formation be authorised by Parliament. Additionally, an organic link to Parliament should be provided by the Minister who should retain a right to give directions to the Company in the public interest both before and after reports are submitted for parliamentary review.[100] In this way, accountability to Parliament would be a continuing process not one interrupted by delays and non-submission of reports.

Other than this, the Company should be totally integrated into the active National Petroleum Company in the form of an operating subsidiary. This approach would be looked at in the proposals for reform.

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100. See, for example, Petroleum and Submarine Pipeline Act 1975 U.K., s. 11 (3) Constitution of B.N.O.C.

TABLE VIII: TRINTOC: DIAGRAMATIC ILLUSTRATION OF CONTROL ACCOUNTABILITY MECHANISM*

Item	Approval/Appointing/ Control BODY	Qualification/ Restriction
1) Appointment of Directors (on formation)	Minister of Finance	Board of Dierctors may appoint directors after formation
2) Appointment of Managing Director/ Chairman of Board	Directors	-
3) Borrowing/ Loan	Directors	-
4) Disposal of Profit	Directors Minister of Finance	-
5) Declaration of Dividends	General Meeting (Min. of Finance)	On Recommendation of Directors
6) Capitalisation of Credit/ Creation of Reserves	General Meeting (Min. of Finance)	On Recommendation of Directors
7) Auditing	Auditor General	Submitted to Minister/ Parliament
8) Budget	Board of Directors	
9) Accounts, Balance sheets, Profit and Loss Account	Laid before General Meeting	Submitted to Parliament
10) Approval of Projects	Board of Directors	-
11) Appointment of Managerial Staff/ fixing of salaries and duties	Board of Directors	-

*Some of the "heads" used in this Chart were taken from Organisation, Management, Supervision of Public Enterprises in Developing Countries, U.N. Doc. ST/TAO/M/65, pp. 95-96.

Source: Compiled by Author

C. EVALUATION AND PROPOSALS FOR REFORM

1. Approach

In evaluating the national petroleum enterprises in Trinidad, a two part approach was used. The first, an *a priori* approach, sought to examine and assess the constituent instruments of the companies in determining the type of functioning permitted. It meant looking from within at the company, and, in the case of TRINTOC, at its annual reports, in projecting its workings, its inter-relationship to other bodies and its capacity for success. The second approach, an *a posteriori* one, examined the local models in terms of international practice. It was intended to see, after examining the constituent instruments of these entities, the organisational framework and role of the state in managing the petroleum sector. Finally, in proposing a model, one has to bear in mind the need for the tailoring of a form to suit the needs of a particular country. Therefore, it was necessary to first look at the conditions for a state petroleum enterprise as set by the state before suggesting a structure. The four main requirements adhered to were, the need for an integrated operation, growth and development of the sector, national participation and training and ministerial control with public accountability.

2. Evaluation

In creating a state enterprise to administer the activities of the petroleum sector, it is a condition precedent that the modus operandi be tailored to facilitate effective management. It is possible to suggest three main requirements for such management:

(1) Policy statements and directives should be implemented.

(2) Daily operations and managements would be conducted in accordance with general development objectives.

(3) Efficiency and accountability would be guaranteed.

In the light of this, it is suggested that TRINTOC is an unsatisfactory arrangement for conducting the affairs of a national oil company. In the first place, it is incorporated under the local companies law which is not designed, nor has it been amended to accomodate a public corporation. Ministerial direction and supervision has not been formalised and defined and it is evident that a clear working relationship between the two bodies has not been subject to serious thinking and organisation. Further, there is no control over borrowing, no reservation of directive power in the public interest and apparently no power to compel a submission of annual reports for the parliamentary process. Such delinquency in the submission of its annual reports shows the lack of a compelling power and an ambivalence, by the company, for its operations to

be reviewed. A need exists for a more organised structuring if proper management is to be achieved.

TRINTOC was definitely created as a private company not as a state enterprise. Its assets came from a nationalisation of private interest and it was never given a complete monopoly status in the industry. Its role was one of management. It was not designed to effectively recoup economic rent for the state. This explains its limited more parochial role. It was not made a necessary part of its operations to undertake large joint-venture concerns as in the Trinidad-Tesoro joint venture operation, nor is there evidence of it being established as a vehicle for a "carried interest" participation. It is without doubt that its eventual role could only be that of an operating company within the structure of a national oil company concern.

The National Petroleum Company has been invested with functions which earmarks its role as a national oil company. It is seen as an advisor to the state as a policy-maker, a commercial public company and an instrument of the state "to promote the economy" in the "development and utilisation of its resources." Its formation has been the subject of parliamentary approval and scrutiny. Assets would come from a state assignment and although it is not a monopolist, it has the potential for being a competitor to private industry. In its role as an agent of participation, it would become a recouper of economic rent for the

state and a center for training. Such a role allows the entity to assume proper management, supervision and control over the petroleum sector.

Nonetheless, certain modifications, in addition to those stated earlier, are necessary. Most importantly, there is the need to endow the company with a financial competence to undertake its task in a more independent fashion. Also a need exists for a more detailed and clear statement of the rights and duties of the Minister, the Board of Directors and the General Manager and their relationship to each other. Such a charter, while safeguarding the Board from undue influences of the Minister would also add clarity to the Minster-Company relationship upon which the whole operation is hinged.

3. A Model for Reform

In the Trinidad economy there is a heavy and almost complete reliance on petroleum income for generating the revenue and annual capital outlay needed by the Government. As a result, there is the need to have a proper development climate. The Government's role must be seen as an organised and important one. It is suggested that the following guidelines should provide the fundamental underpinnings upon which such organisation should take place:

(1) A unification of all petroleum interest.

(2) Full and total integration in operating.

(3) Government shoud assume more of a role of participation and control than one of only regulation.

(4) Services and manpower should be centralised and co-ordinated.

(5) The idea of a "springboard" role for the state should be utilised in getting involved in "downstream" and "upstream" activities.

It is proposed that the National Petroleum Company be a fully integrated operation which should operate as a monopoly interest in the economy. It should be an operating as well as a holding company. The creation of a single company is the most effective means of strengthening the state's role for it assembles all other operations under its control thus allowing for central planning and a conservation of manpower and financial resources. A precondition for this framework, is a vesting of the rights and interest of the state in this national company. It should be a repository of all the state's petroleum interests.

Presently, there is a fragmentation of interest with parallel and separate entities existing alongside. Although there is a political logic in this form of control, it is not in the interest of the industry. A more complete delegation of power and decentralisation of control is necessary. The National Petroleum Company should amalgamate the refining, marketing, natural gas, exploration and production activities under its aegis which would be carried out by subsidiary companies. In addition, joint

venture interest such as the Trinidad-Tesoro concern and carried interest participation as in the South East Consortium, would rightfully come under its direction and control.

The National Petroleum Company should see organisation at two levels, at the Company level and secondly, at the political level. At the inter-corporate level the parent-subsidiary relationship should be implemented. As a holding company it would provide supervision and co-ordination while creating the infrastructural framework to facilitate successful undertakings. In this role, there would be three levels of supervision:

(1) At the individual enterprise level, through the Board of the subsidiary.

(2) At the industry wide level, through the Board of the parent company.

(3) At the national level, through the Minister.

The Chairman of the Board of each subsidiary company should also sit on the Board of the holding company. In the National Petroleum Company there should be a clear division between the operations sector and its corporate affairs sector. This division would delineate the operations and subsidiary activities from the back up services for their realisation and implementation in an organised form. A necessary addition to the corporate services would be a research and planning unit which provides guidance and acts as a monitor of the international industry which is vitally important.

At the political level the Ministerial organisation should reflect the division of labour and specialisation of interest which is characteristic of the public service. For this reason, a three-fold responsibility should take place. First, the Minister of Energy would be directly responsible for the Company and its overall policy as determined by the state. He would provide "directions" in the "public interest" and as such would be the legally appointed organ for restrictig the exercise of corporate power, should this be necessary. Secondly, the Minister of Finance would exercise control over the budgetary allocations, loan funding, guarantees, profit distribution and reinvestment surpluses. Money matters, which are rightfully within this Ministry's jurisdiction, would remain with the Finance Ministry. Finally, the Minister of State Enterprises would do the work of an evaluation unit. It would provide advice on the manpower and directorial talent which is available, advise on steps to improve profitability and assess project undertakings. Its main function, however, would be in evaluating financial performances and so would conduct audit inquiries, in the interest of the Ministry of Finance. This three-pronged supervision would ensure management in the sectors which are most important: operational management, financial management and accountability.

Present indications point to more state interest in the petroleum sector. The Government is discussing the

complete takeover of Trinidad-Tesoro Ltd., an exploration and production interest and Texaco-Trinidad Ltd., a major refinery operation. Efforts are being made for a "rationalisation" of interest.[103] Such action would provide the basis for an "integrated" approach to operation. Indeed, if the suggestions made are heeded, it could provide a strong and integrated enterprise which is able to "springboard" into the "downstream" and "upstream" activities while under effective national control and, most importantly, as an agent of the state.

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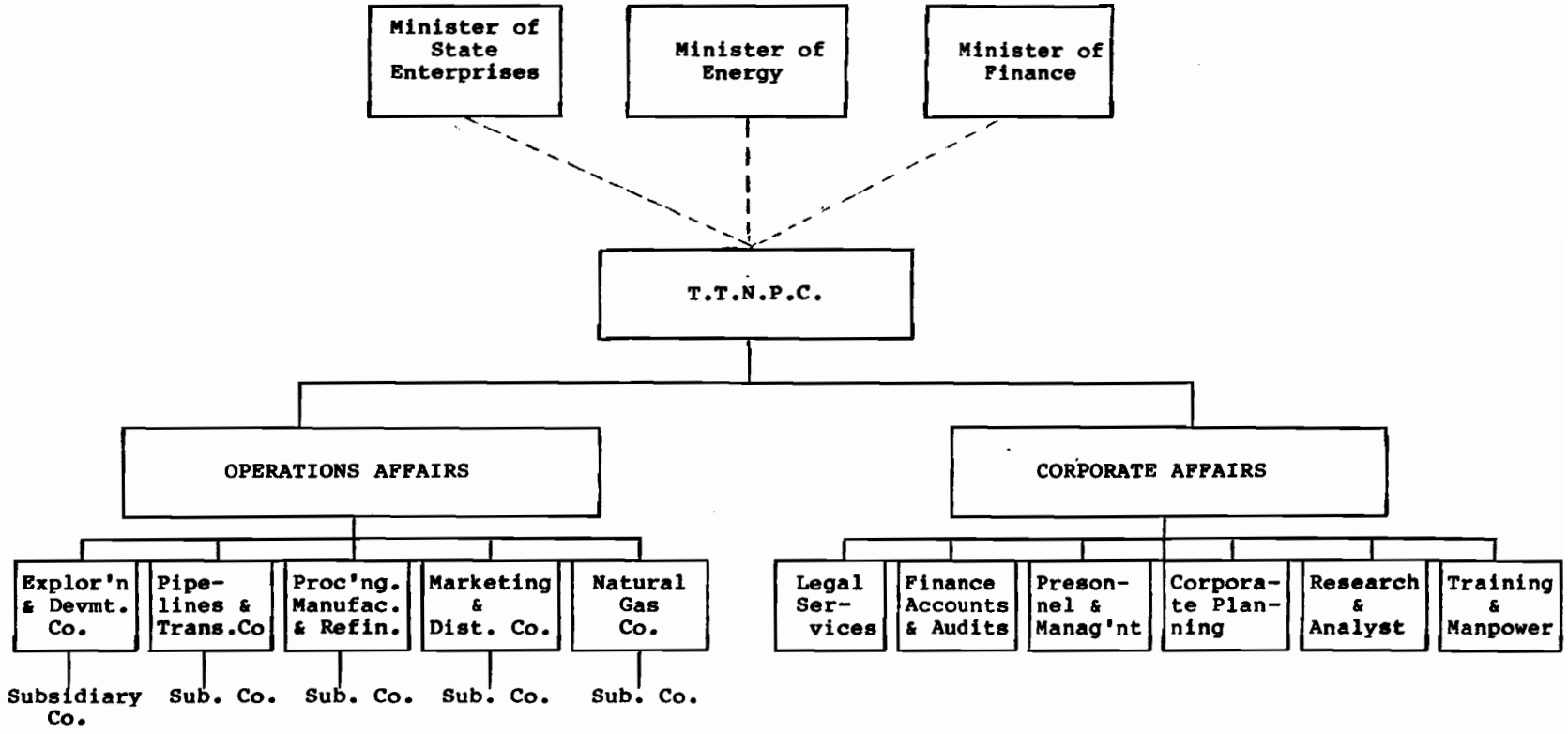
103. See Budget Speech, Govt. of Trinidad and Tobago, 1983, p. 42.

TABLE IX: PROPOSED STRUCTURE OF T.T.N.P.C. AND MINISTERIAL CONTROL



----- denotes indirect control
——— denotes direct control

Source: Compiled by author

CHAPTER FIVE: POLICIES AND PRACTICES IN THE IMPOSITION OF TAXATION, FISCAL AND NON-FISCAL CHARGES ON PETROLEUM OPERATIONS BETWEEN 1962-83

Introduction

This chapter ventures to show, from an examination of the relevant legislation, the policies and practices which exist in the imposition of fiscal and non-fiscal charges on petroleum operations. The main legislation discussed would be the specially designed Petroleum Taxes Act, 1974 and the Petroleum Taxes (Amendment) Act, 1981, together with the relevant provisions of the Income and Corporation Taxes Acts.

In undertaking this analysis, a strictly legal approach is not taken. It is not possible to adequately explain fiscal charges purely in terms of the legal principles involved in their application. While a legal discussion would show the control and management strategy of the charge, it is also necessary to provide an insight into its economic underpinnings since a cashflow and risk explanation establishes its true nature and effect.

Certain charges, though called by the same name in law, may have a completely different impact if the circumstances surrounding their application is different. For example, the Trinidad "production sharing contract" is very similar in form and purpose to the sliding scale royalties

in Norway and Newfoundland. Similarly, the Brazilian "service contract" is totally different from the Iranian "service contract". Such differences prompted one consultant to note:[1]

> "... some fiscal provisions are called the same, yet in detail their economic character are widely different. For instance, the corporate income tax of two countries may be for about the same percentage and may have similar depreciation provisions yet other details such as whether the area to which the arrangement applies is for tax purposes "ring fenced" or not or whether a depletion allowance applies or not ... makes that the corporate income tax of one country in comparison with another country would have a rather different effect on the cashflow and risk ...".

Hence, an investigation of the fiscal and non-fiscal provisions can only be examined from the point of view of a set of variables as they apply to a particular country.

The arrangements which exist in Trinidad are substantially similar to those which could exist in any country which has reasonable commercial prospects, risk-sharing between investor and country and U.S. development interest. The principal features are:

1. Normal corporation tax on net income.
2. Special profits tax.
3. Pre-production and post-production fiscal charges.
4. Certain non-fiscal charges.

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1. A.P.H. VAN MEURS, Modern Petroleum Economics, 1982, p. 558.

5. An incentive scheme based on capital expenditure, cost recovery and adjustable charges.

6. Foreign tax credit eligibility.

In this chapter, reference to other practices is undertaken to highlight points and issues, but the approach seeks essentially to establish current policies and practices in the fiscal arrangements in a particular country. The reason for this, as shown above, is that the matrix is such that charges vary in their use and impact under different fiscal régimes.

The thrust of the chapter is divided into four policy issues. These are:

1. Administration and collection.
2. Taxation and fiscal policies and practices.
3. Tax credits.
4. Evaluation and recommendations.

A. ADMINISTRATION, REGULATION AND COLLECTION OF PETROLEUM TAXES

Introduction

The efficient administration of fiscal and tax laws constitutes one of the requirements of sound financial management. Taxes often represent the most important and abundant source of government revenue. In the absence of proper administration there is the likelihood that significant sums may be left unpaid and improperly assessed. Moreover, there can be wanton disregard and flouting of the law. The main duty then, of a tax department, is the determination of the taxpayer's true liability and the efficient collection and recovery of such sums.

There are other requirements for efficiency. Proper tax administration requires above all, an uncomplicated structure with an efficient staff. Manpower needs must be adequately filled since overworked staff often perform at less than optimum level. Also, there is need for good coordination with other governmental fiscal bodies, a codification and classification of taxes and a proper definition of the powers and status of officials. These should be supported by an effective accounting and auditing system which monitors fiscal activities and realises necessary information.[2]

In Trinidad, the Board of Inland Revenue has been given the authority under the Petroleum Taxes Act 1974 to "be responsible for the due administration of this Act and for the collection and recovery of taxes imposed by the Act".[3] Such authority gives the Board a two-fold power. First, it authorises general management and control over petroleum taxation including the important duty of assessment of liability. Secondly, it allows for a collection and recovery of the taxes imposed by the Act.

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2. See Survey of Changes and Trends in Public Administration and Finance Development, U.N. Doc. ST/ESA/ Ser.E/ 17, pp. 44-45.

3. In order to undertake this possibility, the Board of Inland Revenue has been given power under Petroleum Taxes Act 1974, s. 16 and s. 25, Petroleum Taxes (Amendment) Act, 1981, s. 16. These sections incorporate a table of sections of the Income Tax Ordinance, 1950, as amended, hereinafter cited as Income Tax Ordinance, 1950 which are applicable in performing this task.

It is now proposed to examine these duties in more detail together with a separate analysis of the relationship of the Board of Inland Revenue (hereinafter called "the Board") to the Ministers of Energy and of Finance.

(1) Administrative Operation of the Board of Inland Revenue under the Petroleum Taxes Act[4]

The Board has been given responsibility for the "due administration" of the petroleum taxes. This represents a duty to ensure proper care and management in determining accurately and fairly the true liability of the taxpayer. The liability itself is established by the Petroleum Taxes Act and its amendment, while the rules of computation and assessment are established under the Income Tax Ordinance insofar as it is made applicable.[5] In looking at the obligation of "due administration" of the Board, one can observe two main powers, one relating to information, the other to assessment.

In exercising its administrative duties, the Board has been given certain powers with respect to information necessary in determining the taxable income of persons operating in the petroleum sector. Comprehensive information is important in determining sources of income and in detecting loopholes and tax evasions. It is also necessary

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4. This includes the Petro. Taxes (Amend.) Act, 1981.

5. Petro. Taxes Act, 1974, s. 4.

in assessing liability of tax. Under the Petroleum Act, petroleum operators in production, refining and marketing are required to keep certain information, to prepare and furnish information and to allow inspection of records.

The information which must be kept by the petroleum operator includes[6]

> "proper records and books of account (including annual inventory) at his place of business ... or such other place as may be approved by the Board and containing such information as in the opinion of the Board will enable the taxes payable ... or the taxes or other amounts that should have been deducted, withheld or paid to be determined."

It is further required that separate books be kept for refining, marketing and production operations.[7] The information referred to here would relate to such items as receipts and expenditures, sales and purchases and assets and liabilities, together with profit and loss accounts and balance sheets. These are normal corporate records necessary for accounting purposes. Each business is treated as separate and accounted for as such, since the taxation structure is based on a separation of activities.

The Board may also, for the purpose of "administration and enforcement" of the Petroleum Taxes Act, require persons engaged in petroleum operations to:[8]

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6. See Income Tax Ordinance, 1950, s. 68 read with Petroleum Taxes Act, 1974, s. 28 as amended by Petroleum Taxes (Amendment) Act, 1981, s. 18.

7. Petro. Taxes Act, 1974, s. 28.

8. Petro. Taxes Act, 1974, s. 29 to be read with Income Tax Ordinance, 1950, s. 68A. Also note Income Tax Ordinance, ss. 36, 37.

> "prepare and furnish ... returns, statements of account and data concerning his petroleum operations in such manner and detail and within such time as the Board may, from time to time, require by notice in writing."

Information under this provision, would relate specifically to petroleum operations and would have to be prepared and supplied to the Board. In this sense, records are also subject to inspection. A discretion has been retained by the Board as to the manner and form of the requested information which creates an ongoing obligation to provide anything the Board requires for determining the annual taxable income of the company.

The third information requirement placed on petroleum operators concerns the payment of taxes by instalment. Although taxes are computed and assessed annually, they are paid in quarterly instalments. In making these quarterly payments certain specific information must be submitted which is:[9]

> "(a) in respect of his producing business for that quarter:
>
> (i) the quantity of oil produced and disposed of from land operations and the quantity from marine operations;
>
> (ii) the prices at which the oil was disposed of;
>
> (b) in respect of refining business for that quarter:
>
> (i) the volume of crude oil and petroleum products received;
>
> (ii) the processing fees charged."

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9. Petrol. Taxes (Amend.)Act, 1981, s. 5.

The responsibility for providing this information to the Board, is put on the operator in the production and refining sectors respectively.

In looking at the overall information requirement in terms of the Board's power to provide "due administration" of petroleum taxation one may come to certain conclusions. First, the Board is constituted as a repository for taxpayer information and retains a right to have furnished all information necessary in determining the liability. Information is required at three levels. First, at the general corporate level, secondly, particular information on the petroleum operations and finally specific information on a quarterly basis. Liability is based on a policy of total disclosure. Further, the discretion given to the Board to determine the manner and form of information to be submitted allows for a more thorough and comprehensive compilation of the tax base and the factors relevant for this consideration. This brings one to the question of assessment of taxes.

The second limb of the administrative function of the Board concerns assessment of taxes. The Board has the responsibility of assessing taxes.[10] The prima facie basis for determining the chargeable income in a year of assessment is the returns filed by the taxpayer. The Board can accept this as the basis of assessment or, if it is of the

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10. Income Tax Ordinance, 1950, s. 39.

opinion that there is a liability to pay more taxes, make a determination of the chargeable income based on its judgment.[11] In exercising its own judgment, it would rely on the information provided by the company together with that requested by the Board itself. In addition, it must determine the eligibility of deductions and the manner and business against which it is to be credited.[12] In particular, it must decide which "outgoings and expenses" are "wholly and exclusively" incurred.[13]

The Board is constituted as the agency for determining the tax liability of petroleum companies and a review body in ascertaining the deductible expenditure. It also overseers the rules for the computation of profit and the payment of tax. However, at the basis of these administrative duties is the establishment of the true liability of the taxpayer, in accordance with the intention of the Act.

(2) Collection, Recovery and Enforcement

Once true liability has been established the collection and recovery of taxes becomes a simple exercise.

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11. See Income Tax Ordinance, 1950, s. 38A and s. 39 and Petroleum Taxes Act, 1974, s. 17(a).

12. Petrol. Taxes Act, 1974, s. 27(1)(1).

13. Income Tax Ordinance, 1950, s. 10 and Petrol. Taxes, 1974, Sch. 2, s. 1.

An efficient collection system ensures that taxes are paid in full, promptly and in accordance with the law. The Board has been made the agency for the collection and recovery of taxes owed by the petroleum company in addition to having power of enforcement in the event of default.

The payment of taxes is the obligation of the tax-paying company. Taxes are to be paid in four quarterly instalments in each year of income.[14] If not paid on the duly appointed dates, the Board has power to augment the sums due with interest charges.[15] Further default can result in an immediate demand for payment of taxes, interest and penalties. An action for recovery could also be instituted through a garnishment order or distress warrant.[16]

In enforcing its powers, the Board has been allowed certain rights of inspection, entry and subpoena. It can request information from any person or bank concerning the income and assets of the taxpayer. A more forceful provision allows an entry onto premises containing books and records in order to audit, examine, search and even confiscate such documents as evidence in showing an attempt to evade taxes and defraud the revenue. Further enforcement rights allow the Board to subpoena any person to give

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14. Income Tax Ordinance, 1950, s. 38A.

15. Id., s. 55A.

16. Id., s. 56.

evidence or produce any documents as are necessary for conducting its inquiries. These investigative powers would be exercised in order to make a full recovery of taxes, especially in cases where either no return was made or in cases where it was made but the Board is of the opinion that more than the declared taxes are due.

As outlined earlier, in order to assist with the assessment and collection of taxes, an "Oil Audit" has been established as a specialised oil accounting unit. However, the lack of well-trained staff plus the inability of the departments concerned to show proper co-ordination causes problems. No clear specialisation has been developed internally to deal with the questions of the taxation of petroleum operations. The machinery exists for the proper fiscal administration but the problems inherent in its running suggest that the many deficiencies exist in its actual workings.

(3) Interrelationship of the Board of Inland Revenue with the Minister of Finance and Minister of Energy

A functional relationship has been established between the Board and the Ministers of Energy and Finance, for these are the two ministries directly involved in overseering the petroleum sector. The relationship is related to the powers vested in the Board, to assess and collect taxes and to have a decision in price determination.

There is to be a free exchange of information between the parties for the purpose of assessing the tax

liability of the companies. As the Act states:[17]

> "... the Minister (Finance), the member of Cabinet responsible for petroleum and the Board may exchange information in respect of the petroleum operations of that person (taxpayer) and the Board may require any government department or agency to disclose information which may assist in that assessment."

This would allow disclosure of such things as contracts, expenditure commitments, lifting arrangements and log and well report and analysis all of which would assist in establishing the accuracy of deductions, allowances and expenditure as submitted in returns. It also pierces the veil of secrecy which otherwise may have hindered an accurate assessment of taxes.

In the administering of the levies there is also need for co-ordination. In the case of refining, the Supplemental Refining Tax (S.R.T.) is imposed on each barrel of crude at differential rates for full and light refining. The Minister of Energy is requested to classify the crude into full and light refining and also to:[18]

> "furnish the Board with quarterly statements of the number of barrels of crude oil and petroleum products subjected to each type of refining by every person engaged in petroleum business."

Such information would be imperative if the S.R.T. is to be properly levied. The Minister of Finance would also have

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17. Petrol. Taxes Act, 1974, s. 19.

18. Petrol. Taxes (Amendment) Act, 1981, s. 15 now Petrol. Taxes Act, 1974, s. 26F.

to be in consultation with the Board in cases where there is a variation in the rate of the Supplemental Petroleum Tax (S.P.T.) and the Supplemental Refining Tax (S.R.T).[19]

A very important need for consultation between the Minister of Energy and the Board would also arise in the area of allowable deductions. The Minister must approve the cross deductions of losses in the case where a set off is made against petroleum operations from other business carried on by the company.[20] Also, he must state when "commercial production" has started, for it is only then that certain capitalised intangible costs are made deductible[21] and classify as "development dry holes" for deduction.[22]

In the pricing of crude, natural gas, petroleum products and the determination of processing fees, the Board acts in both a substantive and an advisory capacity to the Minister of Finance. Its substantive role arises when a transaction is not at arms-length for it has to substitute a "fair market value".[23] The Minister of

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19. See Petroleum Taxes Act, 1974, s. 22 as amended by Petrol. Taxes (Amendment) Act, 1981, s. 15.

20. See Petrol. Taxes Act, 1974, Sch. 2, s. 3(2) as amended by Petrol. Taxes (Amend.) Act, 1981, s. 21.

21. See Petrol. Taxes (Amend.) Act, 1981, s. 10(9).

22. Petrol. Taxes Act, 1974, s. 14(5).

23. See Petrol. Taxes (Amend.) Act, 1981, Sch. 2, s. 5(3)(4).

Finances fixes the price, but the Board is to act in an advisory capacity in its determination by virtue of having officials on the price setting Permanent Petroleum Pricing Committee.[24]

Clearly, the Petroleum Taxes Act has contemplated a Board which acts in close relationship with the other departments and the Ministries. Such interrelationship is imperative if the oil companies are to be properly monitored and assessed for the tax liability. Moreover, a consolidation of available manpower is an advisable strategy in implementing fiscal administration.

The main body of this chapter which deals with taxation and fiscal policies and practices will now be discussed. It is proposed to commence with an insight into the basic issues in petroleum taxation.

B. ISSUES IN THE TAXATION OF PETROLEUM OPERATIONS

Introduction

An examination of the issues involved in petroleum taxation requires an investigation of the two dominant interests, that of the state and that of the investor. Fiscal laws are designed in a manner which allows both these parties to find a petroleum venture an attractive economic prospect.

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24. See Petrol. Taxes Act, 1974, Sch. 2, s. 6A as amended.

In looking at the taxation and fiscal setting of petroleum operations one could approach the discussion from three main focal points. These are:

(1) A guarantee of an adequate rate of return to the company so as to make initial and continued development an attractive venture.

(2) An optimisation of government take which captures excess profits for the state.

(3) A harmonisation of local laws in conformity with U.S. I.R.S. Rulings and Treasury Department Regulations so as to allow foreign tax credits.

(1) Rate of Return: Interest of the Investor

A company is interested in profits. Therefore, in assessing a petroleum venture it assesses the profitability of the project in terms of the rate of return on invested capital. The method used to compute this is the Discounted Cashflow rate of return (D.C.F.) which is a financial evaluation based on risk related cashflow analysis.[25] If a company provides a large portion or all of the exploration and development capital it would normally want a high rate of return on invested capital plus total cost recovery. In term of figures, this would mean a rate of return of

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25. It has been defined as:
"that rate which equalises the present value of the stream of annual net cash outflows with the present value of the stream of net cash inflows".
See R.F. MIKESELL, "Financial Considerations in Negotiating Mineral Development Agreements", U.N. Doc. ESA/RT/AC.7/4, 7 Sept. 1973.

between 15%-25%.[26] Within this range, increases in political or economic risk usually weigh in favour of higher returns while the prospects of discovery or a large discovery, reduce the rate of return demands. In any event, the rate of return given to the investor must pass one basic test. It must be such as to make the venture profitable enough to induce the investor to commit his capital and then continue to want to carry out petroleum operations. As such, a tax structure which imposes unnecessarily high charges would be unattractive to the investor, for it would be competing with alternative investments elsewhere or higher interest rates in the investor's home country.[27]

(2) "Government Take": Interest of the State

A state usually designs its fiscal laws in such a way so as to accomplish the highest or most optimum share of the economic rent. This means that they seek to capture a large portion of the income remaining from gross revenue after subtracting production cost. However, since it is

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26. See U.N.C.T.C. Doc., Alternative Arrangements for Petroleum Development, May 1982, p. 41 (internal document).

27. In some countries, tax is not levied below a certain guaranteed fixed rate of return. See for example, the Progressive Incremental Royalty in Canada in Canadian Oil and Gas Land Act. This guarantees a 25% return on capital. See also, Petroleum Revenue Tax in U.K. in Oil Taxation Act, 1975 which guarantees a 30% return.

also their primary concern to have optimum and complete development of resources, a financial package is usually designed which reconciles both these interests.

Ideally, fiscal charges should be related to profitability which would mean that they are exercised after production. However, certain payments are extracted before production takes place but are not made so onerous as to make the venture unattractive. Royalties are imposed when production occurs while taxes come when profits are made. Payments are more weighted at the latter stage since it is less costly to underwrite expenses at the end of a venture than at the start. The timing of payments is of critical importance.

Charges are usually made adjustable to deal with varying profitability. The state usually shares in the economic rent in a progressive manner with more profitable fields subjected to higher taxes.[28] This allows marginal fields to be developed through the imposition of lower fiscal charges. Thus, the application of the law can be made discretionary on the advice of the Minister, taxes may be remitted or they are applied with adjustments. It is recognised that the more differentiation in fiscal terms and charges the greater the possibility that development would take place.

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28. See, for example, the progressive royalty in Norway, Royal Decree, 8 Dec. 1972, s. 26.

It is also important for a company to have a quick pay-out period for recapturing its operating expenses. This is important because of the high cost of borrowed money since with a quick return of capital the company is able to reinvest existing funds. Also, a quick pay-out decreases time related risk such as political uncertainty and economic upheavals in the money market and so decreases risk premium charges. The normal way in which money is recaptured is through capital cost deductions in depreciation, amortisation and depletion allowances. As a means of speeding up this process "accelerated depreciation",[29] "cost uplift" and current cost deductions are all added cost recovery methods. Not all tax structures can allow such immediate return and these are usually used in high risk or low profitability ventures.

The last area which is a source of concern to the company's rate of return is that of excess profits. Most companies do not seek more than an adequate rate of return. However, due to windfall profits in the industry, companies have been demanding a share of these as a means of compensation for all the dry holes which do not yield oil. Nevertheless, states are reluctant to give such returns and normally allow only a fraction of this "top slice" as a means of providing an incentive to the investor.

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29. For example, the Indonesian "double declining" balance system.

Hence, the main issue in a taxation structure, from the point of view of the investor, is the question of the rate of return and the timing of cost recovery payments. Most legislation amply cover these since unless this is done, an investor may never invest.

A state must also determine whether or not it wants to make an economic contribution to a venture and to share the risk involved. If no contribution is made at the start as in a joint venture, then it can provide capital cost allowances and incentives which are in effect forms of tax credits and fiscal subsidies. The manner and form of these contributions are decided by the state but they should be made to promote marginal fields, high risk and unexplored areas plus secondary recovery programmes. By these means the state takes a cut in income but subsidises development cost. Therefore the capture of economic rent is postponed until there is profit.

Returning briefly to the question of excess profit, one finds that this is usually scooped off to the state through additional profits taxes. The idea is that the company is seen as a contractor, a hired employee, and the state does not feel an obligation to provide a share of its income but only to provide an inducement to mine efficiently and optimally.

(3) Tax Credits

Tax laws must be sympathetic to the fact that oil investors do not wish to pay double taxation. Since most foreign investor petroleum companies are incorporated in the U.S., countries which invite these companies to invest must be aware of the U.S. provisions which allow foreign paid taxes to be credited at home. This means that taxes imposed by a foreign country may eventually be borne by the home country of the company and not by the investor company itself. Tax laws which deal with petroleum operations must be in harmony with these tax credit provisions.

The basic requirement for obtaining tax credit is that the laws should be imposed in a manner similar to U.S. corporation law and be non-discriminatory in application. For this purpose, guidelines and regulations are published which show the U.S. interpretation of existing laws and offer guidelines in the drafting of new laws. If laws are not in conformity with these guidelines, then the countries involved should establish a double taxation agreement which harmonises practices with respect to the oil industry.

(4) Taxation Issues: The Case of Trinidad

One finds, in looking at the question of taxation in Trinidad, that the issues are fundamentally similar to those existing elsewhere. There is the need to maintain a

balance between maintaining optimum income from taxation while not interfering with exploration and development activities. As the Minister declared:[30]

> "... the system must of necessity have the ability to tax to the maximum extent possible, petroleum industry profits which are in excess of those required to ensure the long term viability of the industry."

Such reasoning clearly establishes that the state is interested in maximising returns and capturing excess profits while allowing an economically attractive rate of return to accrue to the investor. In seeking to maintain the "long term viability" of the industry, it was decided that "capital and production allowances will be considered in order to generate the activities deemed essential".[31] One can consider these objectives a little more closely.

First, in looking at the question of the rate of return one finds a generous offering. The state sought to offer recently, a rate of return at 26% D.C.F. which represents an increase in the existing rate of return by 1.6% without the incentives.[32] Such a high rate of return took account of many factors amongst which was that the area in question was passed its prime and there was no major oil found in the last nine years. Also, with declining

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30. Minister of Energy Speech, 22 April 1982, Govt. of Trinidad and Tobago.

31. Id., p. 27.

32. Report of Legislative Proposals Committee, Govt. of Trinidad and Tobago, 1980.

production, incentives to develop marginally profitable fields were necessary at a time of increasing inflation and escalating development cost. However, this does represent a rather excessive rate of return in a country where many existing companies have already passed the exploration phase and have made significant returns on capital. Indeed, at such a high rate of return to the investor, one can question the viability of undertaking any petroleum development.

The maximisation of revenue is achieved through the use of a Supplemental Petroleum Tax (S.P.T.) which is designed to capture excess profits in the proportion of 86:14 in favour of the state. However, with the many deductions and allowances, especially the production allowance scheme, the S.P.T. is operative only in the more lucrative fields. Hence the legislation allows a reduction in state income as a means of promoting development.

The main thrust of the fiscal package was to create an incentive programme which would increase the rate of return and share the cost of production. In the reasoning of the Government their share of gross income had increased "from less than 30% in 1973 to 64% in 1975 and to 74% in 1979" which meant that the companies were now shouldered with the cost of increasing operating expenses and capital expenditure from declining profits. It now proposed, through the incentive and added deductions, to share in the

gross profits to the tune of 70-30[33] and, to allow for a speeding up of cost recovery period through enhanced depreciation rates and cost uplift provisions. Indeed, bonuses and levies paid to the state are also made deductible to make the venture even more attractive.

Last but not least, the taxation laws are made in harmony with U.S. tax guidelines in the hope of making tax credits available to the oil companies. This means that the no cost recovery production sharing contracts have been amended to allow the contractors to pay taxes directly as required for tax credits.

In summary, one can say that the tax laws in Trinidad follow all the basic approaches in a legislation designed to attract investment. It is a "no choice option" used by the state since at a time of declining oil prices and reduced investments in oil outside the U.S., a country, such as Trinidad, which is dependent on oil earnings is completely vulnerable. Its policy can, however, be said to be quite generous in its offerings.

C. BASIS OF ASSESSMENT AND IMPOSITION OF TAXES AND FISCAL PAYMENTS ON PETROLEUM OPERATIONS

The imposition of taxes on petroleum operations is levied under specially created legislation dealing with the

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33. An 80-20 share is proposed for existing more profitable areas and a 60 - 35 sharing in more marginal fields. See Report of Legislative Proposals Committee, Govt. of Trinidad and Tobago, 1980.

taxation of oil companies,[34] but the method of assessment and computation is conducted through the general Income Tax Act (Income Tax Ordinance). Tax is charged for each year of income upon the taxable profits for that year. In computing this income there is allowed as a deduction "all outgoings and expenses wholly and exclusively incurred" during the year of income plus deductions and allowances given by the law to the company.[35] The law clearly recognises that petroleum companies are subject to the general scheme of taxes, for it includes as taxable the profits of any company derived from "the operation of mines or the exploration of natural or mineral resources".[36]

It is imperative to properly define the status of the taxpayer in levying petroleum taxes. A fundamental aspect of the taxation laws is the distinction made between resident and non-resident companies. The basic approach is that petroleum taxes are imposed on a company resident in Trinidad, on all its income wherever arising, whether or not such income is remitted to the country or not. A non-resident company, however, is only chargeable on that

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34. Petrol. Taxes Act, 1974 and the Petrol. Taxes (Amendment) Act, 1981.

35. "Taxable profits" is defined for petroleum operations as "the aggregate amount of the profits or gains of any person from production business, refining business or marketing business as the case may be, remainning after allowing the appropriate deductions and exemptions". See Petrol. Taxes Act, 1974, s. 2(1).

36. Finance Act, 1966, s. 43(b).

income arising within the country. The test which determines whether or not a company is resident is one of control. Resident companies are controlled in Trinidad while non-resident companies are not.[37] Hence, since most petroleum companies are not controlled in Trinidad but are only "engaged in or carrying on a trade or business",[38] they are considered as non-resident companies which are liable to be taxed only on income "directly or indirectly accruing or derived from Trinidad and Tobago".[39]

The next question which has to be looked at in petroleum taxation is the question of jurisdiction. Companies are charged on all income derived or accruing from "Trinidad and Tobago". Since most of the operations are offshore, the expression has been taken to mean the

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37. See Petrol. Taxes Act, 1981, s. 2(1) where a "resident company" is said to be "a company that is controlled in Trinidad and Tobago, whether or not such company is
    (a) incorporated in Trinidad and Tobago, or
    (b) engaged in trade or business or in the pursuit of professional or vocational activities in Trinidad and Tobago."
    For the purpose of determining control, it is true that the place of control shall be "the place where the central control and management of the company is ordinarily situated." See Petrol. Taxes Act, 1974, s. 2(5).

38. See Petro. Taxes Act, 1974, s. 2(2) where a person is deemed to be so engaged "if he has an office or a place of business in Trinidad and Tobago or has a branch or agency therein". See also s. 23(1), Petrol. Act, 1969 where it is necessary to have such an establishment as a "condition precedent" to operations, if a company is non-resident.

39. Petroleum Taxes Act, 1974, s. 10(2).

submarine areas which include the sea bed and subsoil and the continental shelf.[40] Hence, operations carried out within the two hundred mile exclusive economic zone including offshore rigs and drilling platform operations, would be liable to petroleum taxes in accordance with the law of the country.

Other than taxes, petroleum companies are also liable to make other fiscal payments as part of their "financial obligations". These are charges imposed in addition to taxes but some of which are deductible in the calculation of net income subject to petroleum profits tax. These charges include royalties, petroleum impost, surface rentals, bidding and exploration fees, import duties and other taxes such as excise and custom duties. There is also a tax on interest in the form of a withholding tax, which also applies to sums repatriated for payment for services and management charges.

Taxes are computed in accordance with an accounting period which usually corresponds to a company's accounting

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40. In Double Tax Relief (U.S.A.) Order 197, Art. 2(1)(b), the term "Trinidad and Tobago" means:
"(i) the islands of Trinidad and Tobago; and
(ii) when used in a geographical sense;
(a) the territorial sea thereof, and
(b) the seabed and subsoil of the adjacent submarine areas beyond the territorial sea over which Trinidad and Tobago exercises sovereign rights, in accordance with Trinidad and Tobago legislation and international law concerning the continental shelf, for the purpose of exploration and exploitation of the natural resources of such area ...".

year and does not exceed twelve months. The accounting method used is the accruals basis. In petroleum taxation the aggregation of all income is not allowed, rather there is a separation of business and clearly defined rules for the set-off of losses. Foreign tax credits are allowed under double taxation agreements such as with the U.S.A. and local petroleum taxation laws usually satisfy creditability guidelines established by the U.S. Treasury Department and the Internal Revenue Service.

I shall now discuss the actual legislation as it evolved from 1962-1983.

D. TAXATION AND FISCAL CHARGES ON PETROLEUM OPERATIONS 1962-83

General Introduction

It is intended in the upcoming sections to show the development of the petroleum taxation regulations from the time of independence to the present time.

The approach taken is to outline the policies and practice in the law in three periods. These are:

1. Before 1974
2. After 1974, the Petroleum Taxes Act, 1974
3. After 1981, the Petroleum Taxes (Amendment) Act, 1981

In examining these periods, a critical assessment is made of each system and the reasons why changes were introduced are outlined. This is undertaken so as to place the law in perspective and to show the intention behind the changes in

the law. In addition, the fiscal charges and deductions themselves are explained.

The value of this section lies in the understanding of the evolution of and approach to petroleum taxation and in allowing for an examination of the existing taxation structure which is discussed later on.

(1) Regime Before 1974

Introduction

The fiscal legislation in this period reflected a desire by the state to invite foreign petroleum companies to develop the local resources. Such a strategy was premised on the assumption that since the cost of production was high due to the complex geographical structuring, the production of oil would prove to be only marginally profitable. As such, in order to attract the oilfield technology and the capital infusion needed to develop the resources, incentives to both marine and land development should be given. The legislation was very much in favour of the oil companies. Moreover, a specially designed legislation, the Income Tax (In Aid of Industry) Ordinance was in operation and this contained in Part II and Part III special incentives to oil investors.

It is now proposed to outline the taxation and fiscal charges imposed during this period and to highlight some of the incentives which are still in operation.

(a) Tax, Fiscal Charges and Allowances

In the period before the passing of the Petroleum Taxes Act 1974, the main charging provisions on the production sector dealt with taxation and royalty charges. However, there were many other incidental levies most of which still operate today. The payments necessary to be made to the state included:[41]

(a) land rentals for land held under lease, the rates fixed between the parties;

(b) a petroleum impost which covered the administrative cost of running the petroleum industry;

(c) a royalty on each barrel of oil won and saved and each 1,000 cub. ft. of gas collected and used;

(d) income and corporation tax at the rate of 42½% of taxable profits;

(e) unemployment levy at the rate of 5% of taxable profits

(f) land and building taxes, harbour and port dues;

(g) withholding taxes on repatriated interest, management and technical fees at a treaty rate of 10%.

In arriving at the base for corporation taxes many deductions were allowed including land rents, harbour and port dues, oil import and royalty payments.

At this time allowances were given under the Income Tax (In Aid of Industry) Ordinance 1950, which sought to

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41. See Govt. of Trinidad and Tobago, Budget Speech 1974, p. 51.

to enhance the profitability of petroleum ventures in the country. These allowances included initial and annual allowances for plant and machinery and buildings, the submarine well allowance and submarine production allowance as well as the land production allowance.

Under Part 1 of the Ordinance, an allowance was given for industrial buildings for the capital expenditure incurred "on the construction of a building or structure occupied for the purposes of trade".[42] An initial allowance of 10% was given, while an annual allowance of 2% of the cost of expenditures on the building. This would have assisted mainly land producers but it was intended to develop the industrial infrastructure of the country in this period.[43]

The other allowance given was for capital expenditure incurred on plant and machinery. Again this took the form of an initial and an annual allowance. The initial sum given was equal to one-fifth of the expenditure and the annual allowance ranged from 10%-33 1/3% of the depreciated value of the asset.[44] This was clearly intended to modernise the industrial sector and to create expansion, its benefit to the oil industry was in encouraging the

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42. Income Tax (In Aid of Industry) Ordinance, 1950, s. 2(1).

43. This allowance is still available.

44. Income Tax (In Aid of Industry) Ordinance, 1950, ss. 15-20.

acquisition of capital assets.

In terms of the oil industry certain allowances were specifically tailored to develop both land and marine areas. In the marine areas, the Submarine Well Allowance which later graduated into the Submarine Production Allowance was given.[45] This allowed a company to deduct the value of a certain percentage of the gross value of its annual production from its gross income before corporation tax was applied. It applied to all oil and gas wells which were offshore in waters of not less than 2,000'. This was tantamount to a percentage depletion allowance granted on a well-by-well basis and designed to encourage deeper marine drillings.[46]

Its intention was to develop east coast drillings and benefitted companies holding submarine oil mining licences granted before 1961. This included the productive Soldado fields held by Texaco and Trinmar holdings.

A land production allowance was given for onshore drillings.[47] This took the the form of a deduction of an

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45. Id., s. 26B.

46. The rates of the allowance are:
    1956-60 - 10%
    1961-65 - 15%
    1966-82 - 20%
    In no case is it to exceed 40% of the chargeable income accruing from each well before the deduction of the submarine well allowance. (This allowance is not being renegotiated after 1981).

47. Income Tax (In Aid of Industry) Ordinance, 1950, s. 25A.

amount "equal to the royalty paid on petroleum won" from new wells or new depths in older wells. It was given for a four year period and was designed to encourage further and new drilling in land areas. However, it was made dependent on production taking place and so only applied to successful wells.

In addition to these, "intangible development costs" were not treated as capital cost deductions which had to be capitalised over the life of the venture. This meant that they were all written off as soon as production occurred thereby postponing the operator's liability to tax. It guaranteed a higher rate of return on capital and allowed cost recovery at an early stage. Companies were also given substantial customs exemptions and duty free concessions for equipment used in their operations.

In the refining sector, the companies were subject to the general taxation laws as a particular system had not been designed for taxing this industry. In computing the taxable profits it was very important to determine the actual price paid for and the price at which crude and refined products were sold. However, this was virtually impossible because of intra-affiliate and transfer pricing used in the processing arrangements under which crude was refined. Large sums were also lost to the revenue due to the system of writing off losses of one sector, e.g. production against chargeable profits of another, e.g. refining. There was a need to redefine the taxation structure.

Conclusion

The taxation laws, in the period before 1974, did not operate to the benefit and interest of the country, if one regards the intention of the law as realising the optimum government take. The laws were not properly thought out and operated to enable the companies to avoid payment of a large amount of taxes.

A major flaw in the approach, was that the production of oil and gas was not viewed as a kind of wasting asset, which required continual exploitation and identification of reserves in order not to render the process one of only liquidation. A policy of capitalisation and amortisation of intangible drilling cost was necessary in the assessment of taxable profits. Further, a clear separation of activities was necessary for tax purposes, for only such division of operating function could reduce the losses resulting from taxation based on accumulated income. In the refining sector, a more stringent regulation was needed to deal with processing fees and the effective refining cost. The taxation of refinery throughput had to be taken out of the hands of the refinery operators just as the pricing of crude had to be made by arm's length decisions.

These suggested changes were not unknown in the period before 1974. A government appointed commission had

suggested as early as 1963 that:[48]

> "there are considerable possibilities for a substantial increase in Government revenue if present procedures in tax assessment are revised and brought into line with practices elsewhere."

These suggestions were not heeded until some ten years after when the Petroleum Taxes Act, 1974 became law.

(2) Regime Between 1974-1981, Petroleum Taxes Act 1974

Introduction

In 1974, the Petroleum Taxes Act[49] was introduced to deal with the "taxation of business carried on in the course of certain petroleum operations." It was in fact the first separate and well defined piece of legislation which addressed the question of petroleum taxation in the post-independence era. The purpose of the Act was two-fold. First, it sought to make structural changes to the existing "basis and method" of determining the taxation of oil companies so as to ensure an optimum governmental take. Secondly, there was a need to update the law in order to:[50]

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48. See Report of the Commission of Inquiry into the Oil Industry in Trinidad and Tobago, Govt. of Trinidad and Tobago, 1963-64, p. 60 (The Deutsch Report).

49. Petrol. Taxes Act, 1974.

50. Budget Speech, 1974, Govt. of Trinidad and Tobago, 1974, s. 52.

"bring practice and prices for tax purposes more in line with the current international trends and give the country the decisive voice in the important question of oil prices."

(a) Charges and Changes

A fundamental change introduced by the law was that the operations of petroleum companies in Trinidad would be classed as separate businesses for the purpose of taxation. In this respect, there were to be three categories of business:

(1) Exploration and production
(2) Refining
(3) Marketing

This meant the implementation of a long-standing recommendation and provided an opportunity for the Government to check the now widespread use of charging off losses in one area of operations against profits in another. Immediately, the state stood to benefit from enhanced returns.

A further change associated with this separation of function took place in the production sector. Production operations were now classified into two provinces, marine operations and land operations.[51] While this assisted in administering a separate tax and incentive program for each sector, it effectively compartmentalised tax computations.

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51. See Petrol. Taxes Act, 1974, s. 14(3).

Further, each new contract or licence was seen as a separate entity for tax purposes. As a result, while existing contracts and licences were classified according to the land and marine division, new contracts were each treated as separate and distinct tax entities. Each company was not now viewed as a separate entity but rather the contract or licence was so viewed regardless of the number of separate concessions in each province which any one company held.

Certain other fundamental changes were made by this Act. Included in this reshaping were the following changes:

1. Exploration expenditure, intangible drilling and development costs were to be capitalised. This was to take place separately for land operations and for marine operations.[52]

2. All expenditure of a tangible nature were to be written off from production business in accordance with depreciation rates approved by the Income Tax Authorities.[53]

3. Corporation tax rates for the oil production (i.e. Petrol. Profits Tax) were to be increased from 45% to 47½% of taxable profits. The taxable base was to be arrived at after certain deductions and allowances.[54]

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52. See Petrol. Taxes Act, 1974, s. 14(3); also note that these allowances were to be given in accordance with the Income Tax (In Aid of Industry) Ordinance, 1950, Pt. II or Pt. IIIA.

53. See Petrol. Taxes Act, 1974, s. 14(4) to be read with the Income Tax (In Aid of Industry) Ordinance, 1950, Pt. I and Pt. VI.

54. See Petrol. Taxes Act, 1974, Sch. 1.

4. In calculating the gross income from production, a tax reference price was to be used. This would be established by the Minister of Energy and the Board of Inland Revenue. The price would be varied depending on the quality and sulphur content of the crude.[55]

These changes represented the main thrust of the legislation and were an attempt to curb evasions and losses in the government revenue.

Changes were also made in the refining sector. The major change was the introduction of a Refinery Throughput Tax. This was a fixed levy per barrel of crude received for refining, regardless of its source. It was imposed "in lieu of the imposition of a tax on the profits of such a business".[56] The Minister had the power to fix this charge which was levied at 10¢ per barrel for the TRINTOC refinery, which is locally owned, and at 15¢ per barrel for the foreign owned Texaco refinery.

The fixing of the Refinery Throughput Tax was directly related to the pivotal role which the refinery plays in the country. Since a majority of the crude processed is foreign in source, it was designed to maintain this flow. In addition, the state sought to maintain:[57]

(1) A measurable flow of revenue from the refinery function.

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55. See Petrol. Taxes Act, 1974, Sch. 2, ss. 5(1), (2).

56. See Petrol. Taxes Act, 1974, ss. 20 and 21.

57. Budget Speech, 1974, Govt. of Trinidad and Tobago, 1974, p. 54.

(2) A competitive advantage for this country in establishing new refinery operations or expanding existing refineries.

(3) The complexity of the refinery complex.

(4) The international oil market at present and in the future.

The marketing operators, who represent divisions of the oil companies themselves or local agents who buy from producers and refineries for resale, are taxed at their normal corporate rate of 45% of taxable income.[58]

In reviewing the Petroleum Taxes Act, 1974, one can focus on two main provisions - the introduction of a reference price for crude and the taxation of operations based on a separation of function.

The tax reference price tied the local price of crude to an international posted price. This allowed the price to be brought on par with an international price. Such action allowed the state to benefit from increased oil prices and served to augment their share of the take. By increasing the price, the taxable base was also increased and, given the restrictions on deductions introduced, the state stood to benefit most from the windfall profits resulting from price hikes.

Another major benefit of the tax reference price system was that the decision on price was now placed in the hands of the state. This meant that since it was a

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58. See Petrol. Taxes Act, 1974, s. 18.

price determined by reference to other crude prices, it was administratively very easy to administer and did not warrant any extensive investigation for its determination. It was easy to monitor since any newsletter or journal dealing with the industry would contain a tabulation on prices. Inevitably, this new system served to significantly reduce the incidences of intra-affiliate pricing which was present in a majority of transactions. Thus, the calculation of gross income became a simple matter of multiplication, i.e. the number of barrels of crude multiplied by the tax reference price.

The use of the tax reference price system was not without its problems. The Trinidad-Tesoro Oil Company refused to pay taxes on prices based on reference crude. They argued that under an existing arrangement with the Government, prices were to be realised prices in actual transactions.[60] This payment, a realised price, which the

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60. Under Heads of Agreement between the Government of Trinidad and Tobago and Tesoro Petroleum Company (Texas, U.S.A.), s. 11 it was agreed to:
"for the purpose of computing its corporation tax liability, in Trinidad and Tobago utilise any formula sales price for oil and other petroleum products which may be prescribed by the Government."
In a letter from the Government of Trinidad and Tobago to the Tesoro Petroleum Company (Texas, U.S.A.) of 25 Nov. 1968, it was stated:
"this will confirm our understanding that the price ... will be charged for income and corporation tax purposes shall be the arm's length bona fide sales price received ...".
(Interestingly, the Government Minister who signed this letter on behalf of the state, is now wanted on bribery and corruption charges).

Government yielded to, cost the country millions of dollars in lost revenue. Trinidad-Tesoro was one of the most prolific producers and a very profitable company. its after tax profit was now twice as high as other companies.[61] Thus, the Government was unable to make the new pricing scheme of the legislation apply across the board.

The new pricing policy, together with the increases in oil pricing between 1974 to 1980, served to significantly increase state revenue in the production sector. The government take, jumped from sixty-two million dollars (U.S.) in 1973 to four hundred and fifty-four million in 1974. In the taxation sector alone its jump was from twenty-nine million dollars to three hundred and twenty-eight million, while royalties tripled.[62]

The other factor which was significant in the new law was the separation of functions and the capitalisation of intangible cost. Intangible costs were now capitalised and were so treated on a licence by licence basis in respective provinces of operation, inland and sea. This reduced the cashflow returns to the company and spread it out over the life of the venture. Such a policy prolonged the life of wells while making allowances and tax incentive measures over a longer period. It also served to treat the

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61. $7:00 (U.S.) per barrel as compared to $3:00 (U.S.) per barrel for other companies.

62. See Accounting for the Petrodollars, Govt. of Trinidad and Tobago, 1980, p. 1.

oil and gas resources more in the nature of wasting assets since allowances were given for exploration and development activity and the identification of new resources. A further beneficial value of these measures, was that it plugged loopholes previously used as tax avoidance measures.

Finally, a word about the changes in the refining sector. The new Refinery Throughput Tax per barrel was introduced. This levied a tax on each barrel regardless of source and so inhibited the use of transfer pricing and artificially set processing fees. The tieing of a refinery tax to each barrel of crude also created a fixed levy rather than a fluctuating one, which would have occurred if gross profits were taxed and there was declining profitability.

Conclusion

The Petroleum Taxes Act, 1974 was beneficial from the state's point of view. It brought practices in line with those existing elsewhere and allowed a capture of the economic rent at a time of heightened profitability.

Although the substantive provisions of the Petroleum Taxes Act, 1974 represent the law, an amendment was introduced by the Petroleum Taxes (Amendment) Act, 1981.[63] The main thrust of the new amendment was to create a series

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63. Act 5 1981, Petrol. Taxes (Amendment) Act, 1981, hereinafter as Petrol. Taxes (Amend.) Act, 1981.

of incentives for increased exploration and development while making adjustments to the local law to allow foreign tax credits. The I.R.S. Ruling 78-222 of 9th May, 1978, issued a directive that foreign tax levied on an arm's length basis would not qualify for a tax credit in the U.S. The Government announced proposed changes to the law in 1979 which materialised in the Petroleum Taxes (Amendment) Act, 1981.

It is now proposed to examine the changes introduced by the 1981 Amendment governing petroleum taxation. Special emphasis would be placed on the taxation of the production sector since this is the main part of the law and is the most substantive revenue earner.

(3) 1981 - Petroleum Taxes (Amendment) Act, 1981

Introduction

This Act was introduced as an amendment to the Petroleum Taxes Act, 1974 which sought to update the existing law in the light of new trends in the industry. In the words of the Minister who piloted the Bill on its second reading in Parliament, the aim of the legislation was:[64]

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64. Min. of Energy Speech on Presentation of Bill entitled "An Act to Amend the Petroleum Taxes Act, 1974" (Second Reading), 22 April 1981, hereinafter referred to as Min. of Energy Speech, 1981.

> "to harmonise with international policies and to ensure the further development of our petroleum resources in the national interest."

These aims must be seen in unison, because the updating of the legislation was essentially intended to create renewed interest in petroleum operations and so encourage further development.

In accordance with this basic aim, the legislation sought to accomplish certain objectives. These were:[65]

> "(1) To promote the further development of the petroleum industry.
>
> (2) To enhance the degree of state administrative control over the petroleum industry.
>
> (3) To ensure that the maximum benefit derived from the depletion of our petroleum resources and in particular, the benefits which result from international market price increases, accrue to the state.
>
> (4) To develop a taxation regime that would be in harmony with international tax systems and provide equitable treatment for all petroleum companies operating in Trinidad and Tobago.

One can say, that it was the desire of the state to achieve a certain measure of administrative efficiency, to establish an equitable regime for petroleum companies while seeking to capture excess profits for the state. These should all be understood within the larger intention of promoting the national development of the industry.

It is understandable that these were the objectives of the new fiscal regime, if one considers the circumstances

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65. Min. of Energy Speech, 1981, p. 10.

giving rise to the amendment. The areas under consideration were showing a depleting production, especially on onshore areas. This is inevitable in an area which is a mature and aging oil basis. Such depletion, together with the need to maintain governmental revenue, saw a concerted campaign to promote further exploration and development activity as evidenced in the law. Also, with new rulings from the I.R.S. in the U.S. certain charges were rendered non-creditable in the U.S. from where most of the oil companies came. A need arose to reshape the fiscal law to take account of these developments.

(a) Taxes and Incentives

The amendment made some significant fiscal changes. While maintaining the system of taxation based on a separation of activity, it sought to add many more incentives while taxing profits in the top slice at a higher range. The following changes were made:

1. The companies were to pay a 45% Petroleum Profits Tax (Corporation Tax) on net taxable profits. The existing rate was previously 50%.

2. A Supplemental Petroleum Tax (S.P.T.) was introduced as a tax on gross income in order to tax excess profits. In its computation, numerous allowances were deductible before arriving at a taxable base.

3. Prices were now determined in accordance with realised prices from arm's length transactions. In cases of non-arm's length transactions a fair market value is to be substituted.

4. Natural gas was to be taxed in a similar manner to production business and arm's length prices would be used.

5. A Supplemental Refining Tax (S.R.T.) was introduced.

6. Allowances were provided on all petroleum production operations. These were deductible from gross income in the computation of S.P.T. They were:

   (a) A sliding scale allowance from 30% of gross income to 10% depending on the size of a producing offshore field.

   (b) An enhanced recovery allowance of 140% of capital expenditure on land operations.

   (c) Incremental investment allowance of 100% of tangible cost in marine areas.

   (d) Exploration allowance of 150% of the cost of drilling exploration wells.

The Act was generous in its incentives but maintained a system of heavy taxation in the event of increased profitability. It was designed to allow the state to take a cut in revenue through the increased subsidisation by the incentives programme, in the hope of making new petroleum ventures economically viable.[66]

Underlying the whole system of taxation was its inherent flexibility and adjustability. The charges were so designed in order to have a varying impact depending on the profitability of the venture. Also, it is meant to maintain

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66. It was estimated that the incentives would cost approximately 100 million dollars in 1980/81 but that by 1982/83 they would provide an estimated increase in revenue of 500 million. See Min. of Energy Speech, 1981, p. 25.

the three fundamental tenets upon which the legislation is designed. These were:

1. The taxing of operations to realise the maximum governmental take.
2. A guarantee of an adequate rate of return to the company.
3. The accrual of excess profit to the state as owner of the resources.

In the area of refining, the charges and allowances imposed can be broken down into:

1. A Petroleum Profits Tax of 45% of taxable income.
2. A Supplemental Refining Tax of $0.05 per barrel for full refining and $0.02 for light refining.
3. The introduction of actual realised arm's length prices in determining gross income.
4. A deductible investment allowance of 120% of capital expenditure on plant and machinery.

The S.R.T. is itself a deductible item in the computing of net income for the purposes of the Petroleum Profits Tax.

In the light of this overview of the development of the tax structure and the policies behind the approach, it is intended to look at the existing taxes and charges imposed on petroleum operations.

E. PRESENT TAX PRACTICES AND POLICIES

Introduction and Approach

It is now proposed to look at the existing system of taxation as it relates to all phases of operation, production, refining and marketing. Because of the present nature

of the charges, they would be dealt with separately.

First, it is intended to look at the taxation of production operations. This will represent the main thrust of this section since it is subject to the most regulation and is of primary importance. For the purpose of this section, taxation is taken to include the various fiscal charges imposed together with certain non-fiscal measures levied on operators. Such an approach would establish the total fiscal liability of the production company.

In making this examination, the charges would be explained in their workings together with the deductions and allowances granted in their computation. The charges themselves would be looked at in terms of their impact, underlying policies and economic underpinnings. It is not intended to make a comparative evaluation since, as explained earlier, the matrix is such that fiscal charges may be similar in concept yet be very varied in practice if different sets of circumstances surround their use. The intention then, is to show the approach taken by the particular country in question and the use of certain variables in its petroleum development.

The Petroleum Profits Tax (P.P.T.) and the Supplemental Petroleum Tax (S.P.T.) will be considered initially. These two taxes constitute the two main revenue earners for the state and the bases of the existing taxation regime. Two important concepts related to tax computation will be outlined. These are "ring fencing", which is a

sophisticated computation mechanism, and secondly, the question of pricing, which is now determined on a realised arm's length pricing policy. Finally, the other fiscal and non-fiscal charges are looked at in order to establish the total governmental take.

1. Taxation on Production Operations

(a) Petroleum Profits Tax

The Petroleum Profits Tax (hereinafter called the P.P.T.) was created by the Petroleum Taxes Act, 1981 and is administered under the provisions of that Act and the Income Tax Act Ordinance. It is in the nature of a corporation tax payable at the rate of 45% per annum on taxable profits or gains. It is applied separately to production, refining and marketing businesses.

In its application it draws a distinction between resident and non-resident companies. Resident companies are subject to P.P.T. on all profits wherever they may accrue while non-resident companies are only liable for tax on those profits directly or indirectly accruing in Trinidad. Essentially, the taxable base for the purposes of the tax is arrived at after subtracting from sales profits the cost of operating expenses, capital allowances incurred in production and those expenses wholly and exclusively incurred in earning this income.

A distinctive feature of the P.P.T. lies in the manner of computing and assessing the taxable take in the production business sector.[67] Net profits have been rigidly defined through the use of restrictions on cross deductions. In the first place, two petroleum provinces, one marine and one land, have been established and further a "ring fence" has been placed on each licence which results in the calculation of taxes on a field by field basis. Hence, losses of one field cannot be written off against profits of another.[68] This applies to contracts issued after 1st January, 1974. Consequently, the P.P.T. is different from a corporation tax in that there is not an across-the-board accumulation of income but rather a separation based on contract.

In giving a more complete understanding of the mechanics of the P.P.T., it is necessary to look at the method of computing the taxable base. For this purpose, it is proposed to look at the deductions and allowances given in its computation.

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67. "Production business" for the purposes of the Act means "the business of exploration for, and the winning of, petroleum in its natural state from the underground reservoir, and includes:
    (a) the physical separation of liquids from a natural gas stream; and
    (b) natural gas processing from a natural gas stream produced by the production business of a person engaged in such separation or processing, but does not include the liquification of natural gas", Petrol. Taxes Act, 1974, s. 2(11).

68. See Petrol. Taxes (Amend.) Act, 1981; s. 10, note also s. 14(3) allows consolidation of accounts in the production sector after 1 Jan., 1980.

(i) Deductions and Allowances

(1) Tangible and Intangible Expenditure

In the taxation of petroleum operations, a distinction is usually made between tangible and intangible cost. Intangible cost is usually defined to mean all the costs of drilling a well except the cost of machinery and equipment installed in the well. These costs are treated differently for the purpose of taxation.

As outlined earlier, these costs were grouped together as capital expenditures for which initial and annual allowances were given in the form of a depletion allowance.[69] However, an annual depletion allowance effectively reduces the corporate tax rate and results in very high profits to the company.

Under the existing regime, tangible and intangible costs were capitalised and written out over a period of time.

The Act stated that in ascertaining the taxable profits of any person carrying on production business for a financial year, that:

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69. The initial allowance was a stated percentage of expenditure while the annual allowance was calculated as follows for production business. The amount was taken as the lesser of one eighth or the fraction of $\frac{x}{y}$ where
    x = the output for the year
    y = the sum of that output plus estimated reserves at the end of the year.
    See Income Tax (In aid of Industry) Ordinance, 1950, ss. 23(1), (2).

> "... all expenditure incurred in exploration operations and intangible drilling and development cost must be capitalised .... All allowances in respect of such expenditure must be allowed in accordance with Part III and Part IIIA of the Income Tax (In Aid) Ordinance ...".[70]

This means that all costs relating to exploration operations and "intangible and development cost" are now capitalised for tax purposes. The allowances themselves are made deductible by Part III[72] and Part IIIA[73] of the Income Tax (In Aid of Industry) Ordinance. The effect of this approach is

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70. Petroleum Taxes Act, 1974, s. 14(3).

71. This is defined by Petrol. Taxes Act, 1974, s. 14(6) as:
"(a) the cost to a person of any drilling or development work done for him by contractors under any form of contract;
(b) all amounts paid for labour, fuel, repairs, hauling and supplies, or any of them, that are used:
(i) in the drilling, shooting and cleaning of wells;
(ii) in such clearing of ground, draining, road making, surveying, and geological works as are necessary in preparation for the drilling of wells; and
(iii) in the construction of such derricks, tanks, pipelines and other physical structures as are necessary for the drilling of wells and the preparation of wells for the production of oil or gas."

72. This defines "capital expenditure" which qualified for deductions before "intangible drilling and development cost" was defined by Petrol. Taxes Act, 1974, s. 14(3). "Capital expenditures" was defined to include both tangible and intangible cost since no distinction was made at this time.

73. This deals with the "submarine well allowance" which applied to leases granted before 31 Dec. 1960 and the "submarine production allowance" which applied to leases granted after 31 Dec. 1960 but before 1 Jan. 1969.

that these expenses are now made capital cost deductions which are spread over the life of the venture. Such a form of deduction, while recognising that they are expenses incurred in entering into production operations, means that expenses would not be made deductible in the year they were incurred. This postponement in deduction would see the application of the P.P.T. at a much earlier point in the cashflow. A graduation over time of these deductible expenses would mean more revenue inflow for the state and less to the investor.

Similarly with tangible expenditure, the expenses incurred with respect to production business are to be:[74]

> "... capitalised and allowances granted in accordance with Parts I, II and VI of the Income Tax (In Aid of Industry) Ordinance".

Again, there is a capitalisation but in the case of tangible expenditure the assets have a predictable life expectancy. As such, they would be written off in accordance with rates of depreciation approved by the Income Tax Authorities over the stated life expectancy period. The actual deductions allowed concern industrial buildings (Part I), plant and machinery (Part II), and sums spent on worker accommodation, (Part IV). The attitude taken to depreciation by this method is that an allowance is given, which treats as an expense in each year of the physical useful life of the asset, a rateable portion of its cost.

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74. Petroleum Taxes Act, 1974, s. 14(4).

Physical assets would now be written off over their expected utility value unless accelerated depreciation rates are given.

The total effect of capitalising both tangible and intangible costs is that cost recovery is spread over either the life of the venture or the life of the asset. Aside from cost uplift and accelerated depreciation, the state stands to have enhanced returns from the petroleum profits tax system and earlier returns to the Treasury.

This brings us to the manner in which expenditure is to be capitalised and the provisions regarding the time of deductibility. Intangible drilling and development cost, together with expenditure incurred in exploration activities, are to be "capitalised separately in respect with each licence or contract".[75] In addition, it is provided that they are "deductible only after the commencement of commercial production".[76] The effect of both these provisions is to create restrictions on the deductibility of losses. In the first place, losses, if capitalised separately on a field-by-field basis, would mean that the amount of deductible loss would be limited to that on a particular field. Accumulated operations losses would not be possible. Further, in allowing deductions only after commercial production, the company stands to lose deductible expenses if

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75. Petrol. Taxes Act, 1974, s. 14(3).

76. Petrol. Taxes (Amend.) Act, 1981, s. 10(5).

there is no production in the year of its computation. This obviously would mean more taxable income for the purpose of the P.P.T.

However, in accordance with the newly created incentives programme, the state has now allowed:[77]

(1) Production businesses carried on after 1st January 1980 to be consolidated for tax purposes.

(2) Expenditure on intangible drilling and development with exploration expenditures to be amortised.

The amortisation of expenditure would allow a carrying forward of unused deductions for expenditure and so create a reduction in the taxable income. Since exploration, intangible and development costs represent the bulk of land expenses, this represents an incentive and substantial cost recovery formula. The consolidation of expenses under different contracts also has its value. It enhances profitability in marginal fields by allowing losses and expenses to be written off from more productive areas. These measures then, are designed to temper the effects of the P.P.T. and to create incentive by way of increased deductions.

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77. See Petrol. Taxes (Amendent) Act, 1981, ss. 10(b), 10(a)(2).

(2) Investment Incentive[78]

Act 46 of 1976, An Act to amend the Income Tax (In Aid of Industry) Ordinance, offered two investment incentive measures to companies operating in the production sector: an investment allowance and a relatively minor but important production allowance. Both are deductible in the computation of taxable profits for the purpose of the P.P.T.

The investment allowance was granted to new capital expenditure[79] in land production. It pertained to new exploration expenditure, tangible or intangible expenses and development cost on or after 1st January, 1975. The allowance itself was an accelerated depreciation which offered a 150% allowance over a six year period, commencing with a twenty percent deduction in the first year and continuing with twenty percent deductions of the residue for the remaining years. It was intended to, and indications are that it did, encourage exploratory drilling and enhance recovery programmes on land, so as to curtail the heavy decline in

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78. See Act 46 1976, An Act to amend the Income Tax (In Aid of Industry) Ordinance, 1976, hereinafter cited as Act 46 1976. This incentive replaced existing provisions for land termed "Land Production Allowance" in Income Tax (In Aid of Industry) Ordinance, 1950, s. 25A; see also Petrol. Act, 1969, Sch. II.

79. This was defined by Act 46 1976, s. 3 as:
"expenditure incurred in relation to the production business on land of any person by way of:
(a) the acquisition of assets of a tangible nature;
(b) the cost of exploration operations;
(c) intangible drilling and development cost within the meaning of Petrol. Taxes Act, 1974, s. 14(6).

land production.

Not all production companies were able to claim its deduction in computing P.P.T. The allowance was not applicable to companies which used realised prices in ascertaining their taxable profits rather than the tax reference price method.[80] This meant that Trinidad-Tesoro was not able to use this allowance, the reasoning behind this prohibition seems to be that a company which is taxed on realised prices would not need an incentive since their after tax profits would already be favourable.

The fact that the allowance was made a retroactive deduction meant that companies qualified for an incremental payment. This unexpected windfall saw some twenty-one million dollars paid as rebates on capital expenditures.[81]

The other deductible allowance given was the production allowance which was a deduction of 15% of the tax reference price value of all crude won and saved on land. This added incentive recognised the high cost, low producing nature of land operators and sought to make it a more attractive venture. Clearly, if land production is not lucrative to the company, it would seek an alternative investment which offers higher yields.

The P.P.T. is made less onerous on land producers through the production and investment allowances. However,

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80. Income Tax (In Aid of Industry) Ordinance, 1950, s. 26G.

81. See Trinidad Express Newspaper, "Oil Firms to Get 21 Million Land Incentive", 27 Oct. 1976.

the investment allowance is dependent on continued investment in operations and only realisable thereupon. The production allowance initiates only upon actual production taking place. Hence, these benefits only reduce the taxable base for P.P.T. if these specific actions occur; expenditure and production of oil.

(3) Development Dry Hole

Expenditure incurred, after June 1974, with respect to a "development dry hole", is allowed as a taxable deduction in the financial year it was plugged and abandoned.[83] These dry holes are drillings which do not yield any commercial output of oil.

The deduction itself represents the difference between the actual expenditure incurred and those sums which have been returned to the company under existing incentives schemes. This prevents double indemnity. The attractiveness of this allowance lies in the fact that it is a current cost deduction. As such, it is a deduction which is claimed in the year it is incurred and so is immediately recoverable. This decreases the risk and cost of exploratory and development drilling in a case where there is no commercial discovery. From the investor's point of view, it is a subsidy because the state recognises the need for a quick

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83. Petrol. Taxes Act, 1974, s. 14(5).

return of capital to make continued exploration possible.

From a policy standpoint, it shows that the state is willing to give a credit in cases where a well is unproductive. It is suggested that benefits should only apply in cases where a contractor could prove larger reserves or increased production.

(4) Deduction of Bonuses

The incentives programme of the Petroleum Taxes (Amendment) Act has created two new deductions in ascertaining the taxable profits of persons carrying on the production business. It is provided by the Act that the following bonuses are deductible:[84]

> "(a) signature bonuses payable on the award of a Production Sharing Contract or on the issue of an Exploration and Production Licence may be capitalised and amortised on a straight line basis over a period of five years; and
>
> (b) production bonuses whenever payable are deductible."

It is the conventional thinking in this area that these payments should not be deductible since they represent pre-exploration expenses and so are not a direct cost of the venture itself.

The signature bonus, a payment made on the signing of the contract, is a cost which is to be both capitalised

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84. Petrol. Taxes (Amend.) Act, 1981, s. 9.

and amortised over a five year period. The selection of five years is arbitrary since, unlike machinery and plant, there is no physical useful life over which the charge could be spread. In making the deduction the "straight line" depreciation method is used which allows a pro rata portion of cost to be deducted in each year over the five year period. This deduction would see an added allowance in the early years of the P.P.T. and so make the bonus payment partly recoverable from taxable profits.

The other allowance given is the production bonus which is a payment made on discovery of oil and on attainment of prescribed levels of production. It is a one time payment made by the company. Its deductibility as a cost of operating can be seen as a device which seeks to make increased production an economically viable option. Since it is deductible in the year it is paid, its payment does not operate as a sap on the incentive to increase production and to work the well efficiently and in an optimum fashion. Producing wells usually offer their highest returns in the later years of production at the time when the company may have already made high returns on its investments. The deductibility of the production bonuses would allow a profit sharing from the lucrative yields in these later years.

Perhaps the most important achievement in making these two levies deductible, particularly in the case of signature bonuses, is that they do not detract from the

development of marginally profitable fields.

(5) Supplemental Petroleum Taxes

The Supplemental Petroleum Tax (S.P.T.) is a deductible item in the computation of the P.P.T. and so reduces, to the extent of its charge, the taxable base for the P.P.T.[85] The reason for this may be to reduce the initial risk perceived by the investor in deciding whether or not to invest.

While the S.P.T. is designed to capture the windfall profits it is not intended to detract from the venture itself. Its deductibility would maintain a favourable rate of return on invested capital especially in marine areas where it is applied at the 60% range.

(6) Petroleum Production Levy[86]

This levy was introduced in 1974 as a means of allowing a subsidised retail price for petroleum products on the local market. The brunt of the charge, as discussed later on, was borne by the petroleum company through what amounts to a royalty charge on gross income[87]

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85. See Petrol. Taxes (Amend.) Act, 1981, s. 15.

86. Introduced by Act 14 1974, Petroleum Production Levy and Subsidy Act, 1974.

87. A similar scheme is in operation in Canada.

The incentive scheme of 1981 allows a deduction of this levy in the computing of P.P.T.[88] Since, in effect, the levy is tantamount to the state sharing in the profits of the company without actually making an economic contribution to the venture, the deduction of the levy amounts to a cost sharing scheme. It also allows the company to benefit from price increases to the extent that the levy is made deductible.

(7) "Wholly and Exclusively" Incurred Expenses

The final deduction which is allowed from taxable profits in computing the P.P.T. are "outgoings and expenses". As the Act states:[89]

> "There shall be allowed for the purpose of ascertaining the taxable profits the deduction of all outgoings and expenses as are wholly and exclusively incurred during the year in the production of profits or gains."

These would be allowed up to the point that the oil is delivered on board the tanker, the ship's rail.

These are expenses normally allowed to all companies. In the case of an oil company, it would involve

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88. Petrol. Taxes (Amend.) Act, 1981, ss. 21(6)(c)(a).

89. Id., s. 21(6)(c)(1).

such costs as transport, storage, handling and charges incidental thereto. In order to qualify for credit, the total charge claimed must be directly related to earning the income.[90]

(ii) Overview

The one factor which is apparent is that many more deductions and allowances are given in arriving at the taxable base for P.P.T. This effectively relegates the importance of the P.P.T. and recognises the use of S.P.T.

It also shows a trend away from the taxation of net income to that of gross income. Such a move is clearly intended to cushion the decreases which would inevitably arise if net profits taxation is maintained in the light of declining production and prices and escalating cost and inflation.

The system of deductions in calculating the tax base for P.P.T. allows the state's incentive programme to operate in areas which would promote development, such as the deduction of the signature and production bonuses which would assist marginal fields and optimum development of better prospect areas. Again, the recognition of these charges as costs of production is necessary in a period of both declining reinvestment surpluses and development expenditure.

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90. See Bentley Stokes and Lowless v. Beeson (1952) 33 T.C. 491 (C.A.), per Romer, L.J.

TABLE X: MODEL TAX PROFILE IN COMPUTING PETROLEUM PROFITS TAX (P.P.T.)*

Gross Income: Income from operations

(No. of barrels multiplied by realised price or fair market value)

less

(1) pre-production payments

(a) Signature bonues
(b) Discovery bonus

less

(2) allowances

(a) Investment allowance (land)
(b) Production allowance (land)
(c) Development dry hole
(d) Capitalised tangible and intangible expenditure

less

(3) taxes on gross income

(a) S.P.T. (60% marine, 35% land)
(b) Petroleum production levy
(c) Royalty

less

(4) existing corporate deductions

(a) expenses "wholly and exclusively" incurred in earning income.

yield: Taxable Profits and Gains
less 45% P.P.T.

yield: After Tax Profits

*Compiled by author

The next tax to be examined is the relatively recent levy called the Supplemental Profits Tax.

(b) Supplemental Petroleum Tax

The Supplemental Petroleum Tax (hereinafter called the S.P.T.) was introduced by the Petroleum Taxes (Amendment) Act, 1981 as a windfall profits or excess profits tax on the production sector of oil operations. It is a tax levied on gross income but there are many deductions employed in arriving at the taxable base. Sums paid as S.P.T. would qualify, as shown earlier, for a deduction in computing the P.P.T. The rate of tax is a differential one with a 35% charge on land operations and a 60% rate for marine operations. In the computation of the tax, marine operations and land operations are taxed and computed separately. At present, a major portion of the state's revenue is derived from this tax.

The one outstanding feature of the S.P.T. is that it is made inherently adjustable in nature and this reflects a certain attitude in fiscal policy. It is stated in the Act that:[91]

> "The Minister may by order and in consultation with the member of Cabinet responsible for petroleum vary the rates of supplemental petroleum tax"; and

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91. Petrol. Taxes (Amend.) Act, 1981, s. 22(2), (3).

> "An order made by the Minister under this section may have effect retroactively from any date in the financial year in which the order was made."

In exercising this power to vary the rates of S.P.T. the Minister of Finance is to be guided by two defined factors, which are:[92]

(1) The movement in world market prices, and

(2) The need to ensure that the state and not the company enjoys the benefits of windfall profits.

Such strongly worded provisions make it necessary that these provisions be examined.

The essential feature of such an approach is that the charge can be made adjustable depending on international trends, market conditions and profitability. In periods of low profits or in areas which are experiencing less than expected rate of returns, the rates can be reduced. By the same token, it can be unilaterally increased in the event of increases in prices and profits. This means that the S.P.T. is made responsive to variations which affect the investor, but it may also be inflated in a period of prosperity.

What can be said of the actual variations. If the effective rates of 35% for land and 60% for marine areas were to be reduced they would result in an unfavourable shortfall in government revenue but would render corporate

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92. Minister of Energy Speech, 1981, op. cit., supra, note 30, p. 22.

after tax profits increased. A reduction which is also retroactive, as allowed under the Act, would see a repayment of taxes in a large lump sum payment in back taxes plus a reduction in present rates. The benefit of these decreases to the state would only be available to the extent to which these retained profits are reinvested and production is increased.

Another option would be to apply differential rates to increased production. This means that existing production would be taxed at existing rates, say 35% for land, but increased production would be taxed at a lower rate, say 20% for land. This will make investment a subsidised and viable option but would maintain existing rate of revenues to the state. The incentive could operate to increase production and profits in the long term. Such a policy would only recognise successful development.

The other area of interest in the application of the S.P.T. are the differential rates charged for land and for marine areas. This seeks to recognise a difference in profit rates and rate of return. Also, it focuses on the higher cost in land based operations[93] caused in part by its labour incentive nature. The other factors responsible for the lower land rates for S.P.T. are the increased cost of secondary recovery methods on land and the low productivity of the wells (20 b.o.p.d. per well as opposed to 400

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93. $7:50 U.S. per barrel as opposed to $2:00 per barrel for marine areas.

b.o.p.d. for marine areas). Given such differential rates, a 35% S.P.T. on land, would see a 15% increase in the market price of crude oil shared 65:35. A 60% S.P.T. in marine areas would see a similar increase shared 85:15; both being in favour of the state. These differential rates can also be seen as providing a form of profit-sharing for land operators and as an incentive to development. Also, it has implicitly recognised, in the tax structure, the high cost labour intensive character of land operations and the high yielding, lower risk marine undertakings.

However, for a more complete understanding of the S.P.T. regime, one has to look at the allowances which are deductible in arriving at the taxable base for S.P.T. These allowances serve to explain the basic underlying concepts beyond the S.P.T. and also highlight the use of incentives for increasing production and aiding marginal development.

These allowances are:

(1) Production allowance
(2) Exploration allowance
(3) Incremental investment allowance
(4) Enhanced recovery allowance

(i) Deductions and Allowances

(1) Production Allowance

In computing the taxable base for the application of S.P.T. in marine operations, a production allowance is deductible from gross income. The allowance is a sliding scale which starts with a 30% allowance for field producing

2,200,000 barrels per annum and decreases to a 10% allowance for fields producing 7,200,000 barrels per annum.[94] The allowance is granted in the form of the money value of the exempted oil. In operation, this allowance is equivalent to a tax exemption granted to the producing company.

The sliding-scale nature of the allowance means that areas of lower production are given a larger exemption than areas where there is high production. Consequently, more profitable fields would pay more taxes than less productive and marginal fields. In terms of its benefit, it allows marginal fields a tax break so as to make them more competitive and lucrative ventures when compared to other areas in which the multinational may operate.

The system focuses its taxation on large producing areas where there would be more profitability. For example, in a field producing 2,200,000 barrels of oil per year only 70% of the output is taxed, while in a field yielding 7,200,000 barrels per year 90% of output is subject to the S.P.T. One caution which may be given in using this form of tax structure in the petroleum industry, is that higher

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94. See Petrol. Taxes (Amend.) Act, 1981, s. 23 where the allowance is given as follows:
"(a) for fields producing less than 2,200,000 barrels per annum: 30% of gross income;
(b) for fields producing 2,200,001 to 3,200,000 barrels per annum: 25% of gross income;
(c) for fields producing 3,200,001 to 6,200,000 barrels per annum: 15% of gross income;
(d) for fields producing 6,200,001 to 7,200,000 barrels per annum: 10% of gross income."

producing fields are not necessarily more lucrative. The size of production is not the only determinant in assessing profitability. High production fields could also be high cost fields if there are such things as high transport cost, deeper water depths to be drilled or intricate drilling and offshore facilities are needed.

The allowance is intended to aid marginal fields through a tax exemption grant which serves to increase profit returns in those areas. Its underlying intention, is to link the S.P.T. charge to the profitability of a field and in doing so it uses production output as the basis for determining profitability. A more accurate system would have been to devise a formula which allows a certain rate of return per field, and on achieving that rate, S.P.T. would apply.

(2) Exploration Allowance

This allowance is given for both marine and land operations as carried out under Exploration and Production Licences. The allowance itself is equal to "150% of the direct cost of drilling exploratory wells and is deductible from gross income in the computation of the S.P.T.[95]

It is obviously an allowance which seeks to promote exploration activities in both provinces of operations and

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95. See Petrol. Taxes (Amend.t) Act, 1981, s. 25.

has an in-built "cost uplift" of 50%. This would serve to cushion the effect of the S.P.T. Also, it allows the company a quicker pay out time, for the cost recovery is enhanced by the uplift provision. Normally, this type of expenditure is not a deductible item in the early chargeable periods. In its present form, it not only allows an enhanced return to the company but also postpones the charge to tax in the early period of the venture.

Underlying the grant of this allowance is the need to promote further exploration work. By allowing full deductions at an early point for exploration expenditure incurred, the company would supposedly benefit by regaining money which can be re-employed in exploration activity. Hence, the more exploration expenditure the lower the taxable income and the more delayed would be the state's fiscal charges. The shortcoming in this concept is that no where is it made compulsory for the money returned to be reinvested. Reinvestment should be made a pre-condition for the credit, and failure to do so should result in reimbursement to the state.

(3) Incremental Investment Allowance

This allowance is directed to marine operators[96] and

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96. By Income Tax (In Aid of Industry) Ordinance, 1950, s. 26H a similar allowance was made to land operators. See also Act 46 1976.

allows a deduction in the computing of the S.P.T. The grant itself allows a subtraction of an amount equal to "the tangible cost incurred in development activity" under Exploration and Production Licences. It is intended to facilitate more heavy capital expenditure in offshore development activity particularly offshore platforms.[97] A 100% deduction of new tangible expenditure is allowed.

In effect, a deduction for operating cost is being made available from gross revenue. This operates in a similar manner to a cost recovery production sharing contract in its intention of sharing risk between the parties while allowing a recovery of operating cost. Given the escalating cost in offshore drilling, this concession can help in the speedier identification of resources in the more promising areas. The fact that it is offered in the development phase, shows that the areas concerned would offer the promise of yielding production in the more immediate future. Therefore, existing companies would benefit from this allowance rather than companies presently embarking on an exploration programme.

(4) Enhanced Recovery Allowance

This is an allowance given for land activities and recognises the need to use enhanced and secondary recovery

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97. See Minister of Energy Speech, 1981, p. 23.

activities on wells currently producing. The deduction given in computing the S.P.T. consists of "140 per cent of all capital expenditure incurred in the acquisition of ... machinery and plant for use in enhanced recovery on land".[98] The machinery referred to are specified in Sch. 3 of the Act and concern a variety of equipment for secondary recovery.

The grant of such a write off is evidence of a policy aimed at extracting every possible barrel of oil from land areas so as to make existing wells more profitable and create further government revenue. While this offers an incentive to land operators for it combines a cost uplift provision, its impact is shortlived. Being in the nature of one time payment, its impact is immediate and short-term.

(ii) Overview

In taking an overview of the S.P.T. and its allowances one can make certain salient points regarding the operation of the tax.

In the first place the allowances are treated as current cost deductions rather than capital cost allowances, as the Act states:[99]

> "Allowances under this Part (i.e. Pt. 2, S.P.T.) may be claimed only in the accounting period in which the expenditure giving rise to the allowance was incurred."

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98. See Petrol. Taxes (Amend.) Act, 1981, s. 26A.

99. Id., s. 26C.

In addition, in keeping with the general scheme of the Act, allowances in respect of land operations may only be set off against gross income from land while marine allowances can only be used for marine operators.[100] However, allowances in each province may be carried forward for that province, to the extent that they exceed the gross income in the financial year.[101] It is basic to this policy that there must be production before an allowance can be made deductible. Given such, the exploration allowance and the incremental investment allowance may have no value to companies which have no revenue against which the expense is allowed. This can occur where a company had no operations in the particular regime, marine or land, in years prior to the achievement of commercial production. This somewhat anomalous situation has arisen because no carry-over exists in a period when there is no production. It is suggested that this could have been remedied with a simple cost depletion allowance.

Nevertheless, the allowances all constitute tax incentives and subsidies provided by the state. The use of the enhanced recovery allowance shows a new policy of extended secondary recovery activity and a recognition of low productivity and expensive cost in land areas. It also seeks to maintain viability in land operations because of

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100. Id., s. 26D(1).

101. Id., s. 26D(2).

its large work force. The production allowance is a tax exemption incentive directed to marginal productivity while the other allowances are cost recovery in nature and hasten operating cost reclamation. This is also promoted by the fact that they are of current cost deductions.

The fact that the allowances are only given for specific activity such as exploration, secondary recovery and development of offshore wells, means that the state is able to have carried out the particular development it requires. Failure to carry out this particular work would result in no allowance being given.

One criticism of the allowance scheme is that in some respects it is immediate and short-term. A more graduated allowance spread over a few years would have induced more prolonged activities. Such a course would be a more longsighted policy and would be more attractive from the company's standpoint.

The S.P.T. itself is a workable and well directed charge. It aims to take more revenue from those areas which can afford it and its adjustability, is a useful device in maintaining its effectiveness in a constantly fluctuating market. Indications are that rates may have to be reduced if prices continue to fall on the international market. The various deductions in its computation attest to an economic contribution by the government in underwriting the company's capital outlay. In this sense, it is more in the nature of an elaborate cost-sharing scheme which seeks to promote

petroleum development.

Before proceeding to look at the other fiscal and certain non-fiscal charges which are levied on the production sector, it is essential to look at two concepts involved in computing the P.P.T. and S.P.T. These are:

1. "Ring fencing" which is a system of tax computation which lies at the very heart of the taxation policy.

2. The system of pricing which establishes the valuation of crude oil and gas in arriving at gross income.

(c) "Ring Fencing"

The concept of "ring fencing" was introduced into the petroleum taxation legislation in 1974. It provides for tax to be calculated on a field by field basis, which means that losses incurred in one field cannot be used as an offset against taxable income of another field. Although "ring fencing" properly applies to field by field separation, its basic idea is also present in the taxing of operations on a separation of functions, such as production, refining and marketing and in a separation of provinces, land and sea. It aims to place restrictions on deductions by determining net income in a very rigid manner.

The law states that exploration expenditure together with intangible drilling and development cost must be "capitalised separately in respect of each licence or

contract".[102] Further, expenditure incurred in the production sector has to be capitalised separately with respect to land and marine areas in computing Petroleum Profits Tax[103] and the Supplemental Petroleum Tax.[104] This means that each licence or contract is taken as an account on its own with a separate profit and loss account. Each separate concession is made liable to S.P.T. and P.P.T. and only expenditure incurred on that particular area is made deductible in computing the taxable profits. To put this another way, this means that the company as an entity for tax purposes is now secondary to the licence or contract and there is to be no aggregation of income for the business as a whole.

The strategy behind the state's introduction of these provisions is to create taxable profits at a very early point in the cashflow. Although many allowances are given, they would not operate to indefinitely postpone taxes for there is now no provision which allows cross deductions in computing taxable profits. This is to say that in the case of the receipts of a single company which holds many different contracts, some of which are profitable others unprofitable, taxes due on the profitable ones would not be reduced or postponed by the losses or allowances on the

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102. Id., s. 10(a); also note the now replaced Petrol. Taxes Act, 1974, s. 15.

103. Petrol. Taxes Act, 1974, s. 14(3).

104. Petrol. Taxes (Amend.) Act, 1981, s. 26D.

unprofitable ones.

The unfairness of a system without "ring fencing" is apparent. In the absence of a ring fence, a company would be able to reduce its effective tax rate by writing off all exploration, development and intangible costs for all concessions held. In the oil industry where costs are extremely high, this would not only allow total cost recovery at an early point but it would also augment the internal rate of return by allowing the company to reinvest unpaid taxes and make profits thereupon. Consequently the actual tax rate would be reduced considerably since returns on reinvested unpaid taxes would significantly discount the tax payments when they become due. This ensures that the state does not lose the potential tax revenue and that taxable income arises at an early point in the cashflow analysis.

A major change has now taken place in the "ring fencing" arrangements in response to the requirements of U.S. tax credits eligibility provisions. It is required by U.S. law that tax be levied on combined or consolidated earnings in order to qualify for tax credits.[105] As such, local taxes introduced the following measures:

1. Production activities carried on after 1st Jan., 1980 may now be consolidated for tax purposes.[106]

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105. See I.R.S. Rev. Ruling 78-222.

106. Petrol. Taxes (Amend.) Act, 1981, s. 10(b).

> 2. Losses from any farming business or any other business not connected with petroleum operations which cannot by wholly set off against his profits from other sources in the year of assessment, may now be set off against the profits or gains of petroleum operations carried on by such person, directly or indirectly.[107]

The effect and intention of the "breaking" of the ring fence are obvious. It means in short, less revenue for the state and more available revenue and write off for the company.

The "ring fence" arrangement is a very good one. It means that the state is willing to share its net income rather than the gross income in that it has allowed cost recovery but it has determined net income in a way that recovery of cost is subject to restriction.[108] However, while the cross deduction of intangible drilling expenses was made discretionary previously,[109] it now appears that those operating under more than one petroleum contract or lease such as Texaco, may have significant write offs to make in view of the consolidation of concessions after 1980. The "ring fence" therefore, has been effectively terminated as it applies to production activities in the period aftr 1980.

(d) Pricing

Pricing is an important ingredient in petroleum

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107. Id., s. 21(b); see also s. 3(2) Petrol. Taxes Act, 1974, s. 3(2).

108. It allows now a "development dry hole" to be written off in the year it was plugged, Petrol. Taxes Act, 1974, s. 14(5). This can also be considered a "break" in the ring fence.

109. Id., s. 15(2).

taxation for it establishes the method for the valuation of oil and gas. This in turn determines the gross income of the company upon which taxes are imposed.

The present position in Trinidad is that taxes are based on the "actual realised price in a sales transaction at arm's length.[110] This represents a departure from the previous position which existed since 1974, when a "tax reference price" was used. The major difference in these two approaches is that, previously price was administratively determined by the Minister whereas now prices are essentially determined by the companies. The reasoning given by the Minister for this change was that a need arose to establish a regime in line with international practice and that the "posted price or tax reference price have all but disappeared" at that level. As such, it was replaced "by the more advanced international system of computing taxable profits on the basis of "realised price for crude oil".[111]

The tax reference price had worked well for the country. It replaced a system where prices were determined by the companies and allowed the country to receive all the benefit of increased oil prices engineered by the O.P.E.C. The basis of the pricing scheme was one which saw local crudes being priced on the basis of foreign crude of a similar quantity while allowing for differentials based on

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110. Petrol. Taxes (Amend.) Act, 1981, s. 21(d).

111. See Minister of Energy Speech, 1981, op. cit., supra, note 30, p. 30.

sulphur content, gravity and freight charges.[112] Hence, the 1974-81 period saw significant prices in the price of local crudes priced on the basis of the tax reference price. Amoco's crude rose to a staggering $54.90 (U.S.) per barrel on 1/2/80 from a low of $15:52 (U.S.) on 1/1/75. The lower quality Texaco crude rose from $14:59 (U.S.) on 1/1/75 to $39:70 (U.S.) on 1/2/80.

In present use is a system which relies on both an actual realised price and a fair market value price. It is stated that the prices for crude oil, natural gas, petroleum products and petrochemicals would be the actual realised price in arm's-length transactions.[113] However, in cases where a transaction is not at arm's length, that is where it is between affiliated or related parties, or where it is

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112. Prices are established in a certain pattern.
1. A base price is established.
2. A transport differential is made.
3. A quality differential is made.
In establishing a base price, a "benchmark" crude is taken, the one normally taken is Saudi Arabian Light 34° A.P.I. which stood at $32 in 1981. Then a freight rate is determined using the Average Freight Rate Assessment (A.F.R.A.) rates. Again a basic rate is taken normally "F.O.B. Ras Tanura" this is the freight differential. The quality differential represent differences for sulphur, roughly 3¢ for every 0.1$ s., gravity variations usually see lighter crudes at a higher price or about 0.67¢ for every A.P.I. A.P.I. represents the American Petroleum Institute scaling based on different quality crudes. See A.P.H. VAN MEURS, Modern Petroleum Economics, op. cit., supra, note 1, pp. 143-146. Trinidad's crude is in the 25° + A.P.I. with the East Coast Amoco crude being about 30° A.P.I. It is a low sulphur, light crude.

113. Petrol. Taxes (Amend.) Act, 1981, s. 21(d).

"not a realistic price" as determined by Board of Inland Revenue, then a "fair market value" is to be used.[114] This fair market price is made by the Minister. Therefore, the system which obtains sees a company determined price except in cases where a transaction is not at arm's length or a price is unrealistic, in which case an administratively determined price is introduced.

The legislation has failed to establish proper guidelines as to what constitutes a non-arm's length transaction. It is not sufficient to say simply that it is a sale between affiliated or related parties since this would cover virtually all transactions in the oil industry. One could perhaps be guided by the United Kingdom position since local tax laws are fashioned after this model. A sale will not be considered at arm's length for Petroleum Revenue Tax in the U.K. unless it satisfies the following:[115]

> "(a) the contract price is the sole consideration for the sale;
>
> (b) the terms of the sale are not affected by any commercial relationship (other than the contract itself) between the seller (or any connected person) and the buyer (or any connected person); and

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114. Ibid.

115. PL/Petrol. Taxation, Supp. 39, pp. 25-26.

(c) the seller (and any connected person) has no direct or indirect interest in the subsequent resale or disposal of the oil or any products derived therefrom."[116]

This approach foresees a more varied set of transactions and bases the test on commercial principles in addition to the relationship factor. In order to implement such a provision, the state should also be armed with information disclosure powers such as the right to:[117]

1. details of the transaction;
2. access to books;
3. documents and records of resident and non-resident company;
4. appoint inspectors to enter the premises to inspect books and records.

It would appear that the mechanism for determining whether or not a transaction is at arm's length is too weak in the Trinidad law and is based on a presumption of fact which could be hard to establish. It is in need of redefinition.

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116. "Connected person" is construed in accordance with Income and Corporation Taxes Act, 1970, s. 533. Broadly, it includes all cases where a company is under control of another or where companies are under common control.

117. See Finance Act, 1975, (U.K.), s. 17. Note, these powers exist in Trinidad only in cases of a default in the payment of taxes.

(i) Determination of "fair market value"

The determination of fair market value is a question for the Minister of Energy. In making his decision he is to be advised by a Permanent Petroleum Pricing Committee. The procedure in making this determination is as follows:[118]

> "(a) widely traded reference crudes similar in quality to the crude to be valued shall be selected and the international market prices of the crudes selected shall be used as the base value of the crude to be valued;
>
> (b) an appropriate price-setting market is selected where substantial quantities of the reference crudes are traded at arm's length and on an ongoing basis shall be chosen;
>
> (c) transportation differential shall be taken into account, that is to say, the difference between the cost of transporting to the price-setting market the reference crudes and the crudes to be valued;
>
> (d) interest charges on the value of the inventory in transit may be considered in determining transportation cost;
>
> (e) other relevant considerations."

This system of fair market value pricing seeks to price the crude in a manner similar to the normal market condition pricing system or an arm's length transaction basis.

In formulating their advice to the Minister, the Permanent Petroleum Pricing Committee can hear representations from the company liable to be taxed at the market value determination. A further review and appeal is allowed

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118. See Petrol. Taxes (Amend.) Act, 1981, s. 21(d).

to the Minister if a party qualifies as an "aggrieved party". At this point they are entitled to present evidence showing their case.[119] This procedure is designed to make a fair and equitable determination of prices. It is also designed to prevent arbitrariness.

The major flaw in this system of determining fair market value is one of manpower and training. It is absolutely impossible for a department with the serious staff shortages of the ministeries and the limited number of trained personnel to monitor complex and distant petroleum transactions in determining the price-setting formula. Secondly, since a great majority of transactions in the petroleum industry are not at arm's length, it is very difficult to establish free market prices. Thirdly, the evidence which a multinational corporation is capable of supplying to prove its case would certainly overwhelm anything which the state can offer. As a suggestion for reform one can suggest a "norm price".

(ii) Suggestion for Reform

A "norm price" could be used instead of the realised price system presently in use and it could operate in a more equitable and beneficial manner to the parties.

This price would be an average, established on the

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119. Ibid.

basis of all pricing information available plus the views presented by the companies. It would be made by the Permanent Petroleum Pricing. It will consider differentials for gravity, sulphur, transport and other factors and represent an average of the arm's length prices for similar type crude. The oil company would also be given an opportunity to discuss this price fixing beforehand. Such an approach recognises the difficulties involved in establishing a free market price given the existing transfer pricing and posted price schemes in existence.

The main attraction of this sytem is its equity and simplicity. It may in fact be higher or lower than actual realised price in arm's length transactions but it offers:

(a) administrative ease in price determination;

(b) equity in so far as over a long period prices may be higher or lower which balances off;

(c) fair representation to both parties in deciding the price for taxation;

(d) immunity from the tranfer pricing which companies have been guilty of.

Over and above these benefits, the norm price is a recognised mechanism in computing taxes for the purpose of the U.S. tax credit regulations.[120]

These measures would serve to create a system for pricing which would serve the benefit of the country. It

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120. See I.R.S. Regulations on Foreign Tax Credit and Posted Price, 12 Dec. 1980.

would also go further in ensuring that the tax evasions resulting from artificial pricing are not allowed to continue while guaranteeing to the company, a fair hearing of their viewpoint.

It is now proposed to discuss the fiscal and non-fiscal charges which are imposed in addition to taxation. Taxes are responsible for the "lion's share"of the state's revenue but these other charges are also important is determining the company's total fiscal liability.

(e) Other Fiscal and Non-Fiscal Charges

Introduction

The state seeks to capture its share of economic rent in many different forms. Taxation is the best known method and is a charge on profits. However, there are many other charges which are imposed on the company. Some are fiscal, some are non-fiscal but their basic intention is to return some benefit to the state.

It would be found that they are imposed at different points in the operation and are intended to either charge an activity or cover an expense of the state. For whatever reason, all these charges are assessed in terms of the total cashflow and so have an impact on petroleum development. These are now looked at, beginning with fiscal charges, in order to show the total fiscal liability of the company.

(i) Royalty

It is recognised that a royalty shall be charged on operators as part of their "financial obligations" under the licence. This charge is to be made on production since, as the law states, the licensee:[121]

> "shall pay a royalty at a rate to be specified in the licence on the net petroleum won and saved from the licensed area."

The rate is to be fixed by law but it is adjustable if ministerial discretion decides it necessary in the public interest.[122] The present royalty charge now ranges between 10%-12% of the "field storage value" of crude oil.[123] It can, however, be taken in kind upon requisite notice being given. Hence, the royalty can be seen as a tax in lieu of the taking of the mineral itself and so can be considered a payment for the vesting of mineral rights belonging to the state, in the company.

The payment itself is made by the licensee, on a quarterly basis by but the state retains a right to make the

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121. See Petro. Reg., 1970, s. 61; see also Petrol. Reg., 1970, s. 55 and Petrol. Act, 1969, s. 11.

122. See Petrol. Reg., 1970, s. 63; see also ss. 66-60.

123. See Petrol. Reg., 1970, ss. 66(1), (2) where "field storage value" shall be calculated by "aggregating the values of the volume of the component fractions in the crude oil and deducting therefrom a refinery and handling allowance equal to 9% of such aggregate of values".

assessment itself where:[124]

(a) the licensee fails to make the estimate required;

(b) the Minister considers that the estimate made by the licensee is less than the proper estimate.

It is not a charge which is dependent on the profitability of the venture but rather one which relies on the occurrence of production. As such, its impact on the risk investment is minimal since it is spread over the life of the productive field. However, since it occurs at an early stage of production, it can operate to increase the cost of production in marginal fields or where profits are low. As a safeguard against this, the Minister is allowed to reduce its rate or to give a complete remission of the charge.

The concept of the royalty was also applied in the no cost recovery production sharing contract. These were contracts in which a sliding scale royalty was used and the state's share was taken in kind. The royalty in this case, took the place of taxes whereas under the present scheme it operates in addition to taxes. In fact, the effect is very similar for the use of the royalty in the contract created a sliding scale tax which escalated with production increases. It was levied on gross income and increased according to a set schedule. Under the present structure, the royalty together with the S.P.T. operate as the major taxes on gross

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124. Id., s. 70.

income.

The royalty payments go into a special Petroleum Development Fund for special projects.

(ii) Petroleum Impost

This is a minimal charge imposed on oil companies and is "intended" to cover the expenses of the public administration of the petroleum industry.[125] It is levied in respect of all petroleum won and saved at rates determined by the Minister and issued as Rating Orders. The actual expenses intended to be covered by the levy are:[126]

1. Annual expenses of the Ministry of Energy including salaries, pension contributions and maintenance.

2. Expenses relating to or incidental to the administration of the industry.

It seems as if the intention of the levy was to place the cost of running government services in the hands of the industry.[127]

This charge seems to be an oddity. It is conditional on production yet it is intended that all companies cover the cost of administration, although not all

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125. Petrol. Act, 1969, s. 11(c).

126. See Petrol. Reg., 1969, s. 73.

127. In 1979, impost amounted to 5.53 million dollars. See Accounting for the Petrodollars, Gov't of Trinidad and Tobago, 1980.

operating companies are producing. In terms of its value, it would be considered a paltry sum and an added administrative duty. There is no doubt that it should be brought to an end since it is ineffective in collecting the economic rent.[128]

(iii) Rentals

Surface rental fees for land are recognised as "minimum payments" which must be made by each licensee. The basis of the charge on the licenseee is to:[129]

> "pay for all Crown lands which may take upon lease, use or occupy for the purpose of the licence an annual surface rent and any other payment usually applicable to such grant at such rate per acre as the Minister may fix and specify in the licence, or in the case of land that is Crown land ... at such rate per acre as may be agreed between the parties."

The purpose of this charge, in the case of Trinidad, is to collect a minimal rent for Crown lands so as to satisfy the law requiring rental of these lands. Also, to collect a sum which would cover certain administrative costs associated with these efforts.

Land rental provisions are usually used to either prevent operators from "sitting on" rented areas or for

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128. In 1972, it was said that "the oil impost should be abandoned as unsuitable for today's position of the Government towards the oil industrty". See Report of the Commission of Enquiry into the Oil Industry in Trinidad and Tobago, 1963-64, p. 61.

129. Petrol. Reg., 1970, s. 60; see also Petrol. Act, 1969, s. 60.

returning to the state some of its leased areas so it can cash in on the prospects of oil in the land. However, these are dependent on rapidly escalating rental provisions as, for example, in Norway. In this sense, surface rentals could be equated to relinquishment provisions for the effect is the same in that it makes the operator give up unused land.

In Trinidad, the surface rentals seem to be a useless anachronism. First, there are built-in relinquishment provisions which require automatic surrender of fifty percent of leased acreage after three years. Secondly, the minimal nature of the rental payments does not serve to prevent an operator from "sitting on" land for the rent is easily affordable. Clearly, there is a need for rethinking their use.

As a suggestion, the rentals should be made stiffer payments. In this way, the operator would consider working the area or giving it up. Alternatively, rentals could be allowed as a deduction from any expenditure made and so an incentive would be created to work the land. It could also be linked to well depth drilled and deductions could be offered to facilitate more recovery work. In the absence of these, they provide little money and serve little purpose.

(iv) Bonuses

(1) Signature Bonus

The signature bonus is a one time payment on the signing of the contract which becomes due within ten days of actual signing.[130] In the most recently concluded production sharing contract with Mobil Exploration Trinidad Ltd., the signature bonus was 20 million U.S. dollars. This is a very high sum which has to be paid at the start of the contract.

Since it is paid immediately on signing, it is a pre-production payment. Such a large pre-production payment could significantly affect the net cashflow in the company's assessment especially if high discount rates are used. This means that it could have a negative impact on the net present value. Consequently, it could see a reduction in the rate of return per dollar risk investment and so serve to reduce expected profitability. Its major contribution to the state is that it would augment its foreign exchange holdings.

The disadvantage of this payment is that it may act as a disincentive to companies which are contemplating the development of marginal fields. However, the fact that it is now made a deductible item in computing taxable profits for

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130. See Petrol. Reg. (Competitive Bidding) Order, 1973, Sch. 2, s. 4A(1)(c)(x) and Petrol. Reg. (Competitive Bidding) Order, 1979, Sch. 2, s. 4(2)(a).

the Petroleum Profits Tax would minimise this disincentive. It is now possible to write off its payment from profits and this would immediately reduce the risk investment and improve the profitability cashflow to the company especially, in areas of marginal returns.

From the state's viewpoint the signature bonus adequately serves the purpose of capturing economic rent. Since companies are asked to submit a proposal of an amount of signature bonus as part of their bid under the competitive bidding scheme, the signature bonus would be related to the amount the company expects to receive in returns. Hence, the bid can be said to be functionally equivalent to an auction bid in which case the expected returns directly influence the bid. This bidding system allows the state to gain an adequate portion of its expected economic rent at the very start of the contract through the signature bonus payment.

(2) Production Bonus

This is a bonus for a few million dollars which is paid at specific times in the life of the contract. It is a production related payment.

In Trinidad, it is the payment of a sizeable sum of money on the attainment of commercial production and also on the achievement of stipulated levels of production. Like the signature bonus, the production bonus is made part of

the "minimum proposals" under the discretionary competitive bidding system. A bidder must make a proposal as to the amount of money he would like to offer for payment. In the recent Mobil P.S.C., the amount payable on commencement of commercial production was $7,500,000 (U.S.).[131] These represent quite substantial sums of money which may be made on commencement of production and on attainment of specific levels of production.

The value of these payments lies in the fact that the state is able to immediately share in the rewards of a production well or a bonanza strike. However, the fact that large sums are taken off a profitable investment may threaten the development of the field or may deter a company in exploiting the field to its optimum production. This has recently been mitigated by making the total production allowance a deductible item in the year it was paid, in computing taxable income. As a result, profits would be distributed more evenly.

It is questionable, however, whether such a deduction is a necessary one if it is given in the later life of

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131. The other production bonuses under the contract were:

(a) one year after the commencement of commercial production	$ 5,000,000
(b) two years after commencement of commercial production	$ 5,000,000
(c) three years " " "	$ 5,000,000
(d) four years " " "	$ 5,000,000
(e) five years " " "	$ 4,500,000
(f) at 50,000 barrels per day	$10,000,00
(g) at 100,000 barrels per day	$12,000,000

the production. In the first place, the most productive life of the field may be achieved in the middle life of the contract. At this time the company would have recovered the major part of its initial investments. So, for example, if a 100,000 barrel per day mark is achieved in the twelfth year and the company is given a deduction for the 12½ million dollar bonus it has to pay, this may be a superfluous bonus. It would indeed represent an extra deduction after full cost recovery and adequate returns on investment. At this point taxes should start to slowly escalate rather than decline or a joint venture carried interest scheme should have been implemented some years before.

Clearly the deductibility of the production bonus is intended as a profit-sharing scheme where the company would receive part returns on commercial discoveries and increased production. Such a benefit would serve to enhance the prospective profitability of areas.

(v) Unemployment Levy

There was created in 1970, in the aftermath of serious national upheaval, a levy described as the "unemployment levy". Its ostensible purpose was "for the relief of unemployment and the training of unemployed persons".[132]

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132. Act 16 1970, Unemployment Levy Act, 1970, s. 2(1).

The charge is levied at the rate of 5% on all companies with a taxable profit in excess of $10,000. The part of the profit which is subject to the charge is only that part which exceeds the $10,000 in the year of assessment.[133] In computing the chargeable income for the purpose of levying the Petroleum Profits Tax (P.P.T.) the unemployment levy is not made a deductible item.[134]

It can be said that this charge effectively increases the corporation tax rate from 45% to 50%. In the period 1974-81, the corporation tax increased from 45% to 50% and now stands at its original 45% rate. A simple addition to the corporate tax rate again could take the place of the unemployment levy while preserving its socio-economic intention of assisting the unemployed. Alternatively, job creation and training programmes could be designed by the oil companies themselves which would see an immediate implementation of the fund rather than its use being made dependent on the slow government bureaucracy. From 1973-1979, 898,046 million dollars has been collected through this levy while only 486,047 million has been spent for its purpose.[135]

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133. Id., s. 7.

134. Id., s. 12.

135. See Accounting for the Petrodollars, Govt. of Trinidad and Tobago, 1980, p. 26.

(vi) Petroleum Production Levy

This levy, as shown earlier, was introduced by the Petroleum Production Levy and Subsidy Act[136] as a charge imposed on companies in the production sector. Its intention was to act as a cost of living allowance to taxpayers in that it sought to maintain artificially low prices at a time of escalating energy prices.

The levy works as follows. The National Petroleum Marketing Company (N.P.M.C.), which is a nationalised marketing and distributing company, purchases the petroleum products to be used in the local markets, at an international price. These products are then resold by the N.P.M.C. to local consumers at a controlled price. The Petroleum Production Levy represents the price difference between these two prices and it was paid by the petroleum companies to the Government as recipient for the N.P.M.C. In order to ensure equity, there was a fair apportionment of cost between all producers based on a cost per barrel ratio.

This levy, which has a degree of political backing, tion, is in fact a sophisticated royalty charge. The state is seeking a distribution of gross income between itself and the companies but allowing the customers to benefit in the form of a cost of living allowance. Companies usually resent such charges since they take a cut in profits, while

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136. Petrol. Taxes Act, 1974.

the state does not make an economic contribution in the earning of the income.

Such a price control mechanism besides being a wise political move, offers a direct benefit to the consumer. In the social context, it may mean that the customers may not be as cautious in their use of gasoline than if prices had been hiked.

(viii) Withholding Taxes

The withholding tax is a tax on non-residents. It is applied on any payment[137] or distribution[138] to any person not resident in Trinidad and Tobago or a person on behalf of such person or to a non-resident company. The tax is a payment at the source of the income for sums which are

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137. This means a payment of:
"(a) interest, discounts, annuities or other annual or periodic sums;
(b) rentals;
(c) royalties;
(d) management charges or charges for the provision of personal services and technical and managerial skills;
(e) premiums, commissions, fees and licences;
(f) such other payments as may be from time to time prescribed."
See Income Tax Ordinance, 1950, s. 23A.

138. This includes, inter alia,
(a) dividends;
(b) assets of the company including shares;
(c) redeemable share capital or security;
(d) interest or other distributions out of assets of the company in respect of securities of the company.
See Income Tax Ordinance, 1950, s. 23(1).

sent abroad as payment for, inter alia, interest charges, management fees, personal and technical services as well as commissions, fees and licences. Its primary concern is the taxing of certain outflows to non-residents.

The charge to withholding tax applies in cases of a remittance or a deemed remittance. A deemed remittance takes place to the extent that a non-resident company has not reinvested part or all of its profits to the satisfaction of the Board of Inland Revenue.[139] In such cases, the local office or branch of the non-resident company shall be held accountable for the withholding tax. The local payer of these payments and distributions is held accountable for taxes rightfully due by the payee. By constituting the payer accountable for the tax, the Inland Revenue is creating a tax obligation regardless of remittance. It is apparently an attempt to curb tax evasion and to maintain a taxation of income tax at source. Sums on which withholding tax has been paid are not liable to corporation tax.

The withholding tax applies at either a treaty or non-treaty rate. It is up to the person liable for the tax to prove that "a reduced rate of withholding tax applies under or by virtue of the double taxation agreement".[140] In the absence of this, it applies at the rate of 25% in dividends classed as portfolio investments and dividends from

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139. Id., ss. 23A(6), (7).

140. Id., s. 23A(3).

substantial holdings while interest is charged at 25% . In cases of a treaty, say in the case of the U.S., the respective rates are 10% and 15%.[141]

The withholding tax is designed to curb evasions of direct taxes. For this purpose, Central Bank approval is tied to the remittance of profits and non-residents must show that all local taxes are paid before certification is given for repatriation.[142]

The withholding tax seeks to levy a charge on certain repatriated money of the oil producing country. It is nothing more than the imposition of taxes on sums which would otherwise be liable to local direct taxes had they not been repatriated.

(viii) Non-Fiscal Charges

In establishing the total fiscal liability of the oil producing companies, one should not overlook the non-fiscal charges which are imposed. These represent equally important devices for capturing the economic rent.

If one had to suggest certain basic features of these charges it can be said they they require:

(a) a financial output by the company;

(b) use of the sophisticated technology or technical "know how" of the company;

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141. Id., Part II, Sch. 2.

142. See Exchange Control Act, 1970, s. 11; also note "Approved Investment Status" under the Act.

(c) provision a socio-economic or welfare contribution to the country.

Hence, they are all in principle fiscal contributions and serve the purpose of maximising the governmental take in the same manner as fiscal charges. In this sense, they render the contract a form of economic development agreement.

In Trinidad, these non-fiscal charges can be found at certain stages. First, in the pre-exploration phase, seismic and geological information is gathered at company cost and handed over to the state. This represents a financial input by a company for this information can be reused in subsequent lettings. At the pre-production stage, there is also the relinquishment provision in contracts, which allows a return to the state of acreage which can then be exploited for its oil and let at a premium if there are good discovery prospects.

At the later stages of the agreement, there are other fiscal benefits such as:

(a) the scholarship and training obligation of the contract;

(b) carried interest participation as in the Competitive Bidding system;

(c) state participation interest as in the S.E. Consortium Agreement;

(d) obligation of contracts to participate in a "National Oil Spills Clean-Up Plan";

(e) obligation to build a refinery on the attainment of a 100,000 b.o.p.d. mark;

(f) price control mechanism in the petroleum production levy and tax reference price system.

These non-fiscal charges all add up to a certain cost contribution by the company and a use of their technical know-how. Although their impact on the total cashflow arrangement may be similar to fiscal charges, they are aimed at certain social, environmental and development-oriented objectives.

Conclusion

The Government's policy suggests the use of a variety of fiscal charges in conjunction with taxation. The charges themselves are varied in their impact and in the intention. It is clear that the present practices suggest a desire to ease the fiscal burden on the company, to create more reinvestment funds for exploration and development and to optimise government revenue in the long run. However, the incentive programme offered is extremely generous for a country which has proven reserves of petroleum and gas and reasonable geological prospects. It short, the present practice may be said to be too much in favour of the company.

Some changes can be made. The petroleum impost and surface rental payments are in need of redefinition and are of minimal value in collecting economic rent. The unemployment levy and petroleum production levy are well intentioned and aimed at fulfilling certain socio-economic needs, by allowing the economic rent to be passed directly to the

citizenry and to improve their living standards. Royalty charges reimburse the state for the depletion of its resources while bonus payments are lump sum advance grants which provide part of the prospective economic rent. Non-fiscal charges should not be underestimated in value for in addition to enlarging the contract into a development agreement, they channel the government take into areas of public interest.

Perhaps the single most important move in maximising the government take is the creation of taxation on gross income through the S.P.T. This recognises the need to at least maintain revenue at a certain level and to create a receptacle for capturing higher profits should they accrue. The tax structure is intended to be linked to profitability, an intention evidenced by the production allowance.

If an investor were to view the present arrangements in Trinidad, they would appear inviting. A rate of return of 26%, reasonable prospects of oil and gas discovery as shown in geological data, numerous deductions and allowances and a scheme of profit sharing in lucrative areas. It seems that this is the intention of the present law.

TABLE XI: DIAGRAMATIC ILLUSTRATION OF FISCAL AND NON-FISCAL CHARGES ON PETROLEUM PRODUCING COMPANIES*

PRE-PRODUCTION FISCAL CHARGES	POST PRODUCTION FISCAL CHARGES	NON-FISCAL CHARGES
1. Signature bonus	1. Petroleum Profits Tax	1. Relinquishment (pre-prod.)
2. Bidding fees/ Application fees	2. Supplemental Petrol. Tax	2. Seismic and geological studies (pre-prod.)
3. Purchase of geological information	3. Royalties	3. Carried Interest (1973 Bidding)
4. "Expenditure Obligation" (in first six years)	4. Petroleum Impost	4. State Participation (S.E. Consortium)
	5. Unemployment Levy	
5. Surface Rentals	6. Petroleum Prod. Levy	5. Scholarship and Training
	7. Tax Reference Pricing (1974-81)	6. "National Oil Spill Clean Up Plan"
	8. Import and Excise Taxes (if non-exempt)	7. Obligation to build a refinery on achieving 100,000 b.o.p.d. (Amoco).
	9. Deposits of performance bonus under "Expenditure Obligations"	
	10. Surface Rentals	

* Source: Compiled by Author.

2. Taxation of Refinery Operations

The present tax system sees two main taxes being imposed on refinery operations in Trinidad. The Petroleum Profits Tax is imposed at the rate of 45% while the Supplemental Refining Tax is a fixed levy on each barrel of throughput.

The Supplemental Refining Tax (S.R.T.) is an adjustable charge which is imposed on persons operating in the refining sector[143] and is a deductible item in the computation of the Petroleum Profits Tax.[144] It is imposed on each barrel of throughput at the rate of 0.05¢ (U.S.) for full refining and at 0:02¢ (U.S.) per barrel for light refining. The Minister of Energy is to determine what is full refining and what is light refining.[145]

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143. Petrol. Taxes Act, 1974, s. 2(1) defines "refinery business" as:
"the business of the manufacture from petroleum or petroleum products of partly finished or finished petroleum products and petrochemicals by a refining process but not including:
(a) petrochemicals manufactured by a petrochemical plant operated separately from any such business;
(b) the liquification of natural gas;
(c) the physical separation of liquids from a natural gas stream and natural gas processing from a natural gas stream by the production business of a person engaged in such separation or processing."

144. Petrol. Taxes (Amend.) Act, 1981, s. 26E.

145. Id., s. 26F.

By creating a taxing regime based on a tax on income, the P.P.T. and supplemental tax, S.R.T., seemed to have been necessary in view of foreign tax credit provisions in the U.S. This system would appear to have qualified as "taxes paid" and so refinery operators can now gain a tax credit for local taxes in their home country. Previously, a Refinery Throughput Tax was imposed on each unit of crude received for refining. It was imposed "in lieu" of any other taxes refinery operators may have had to pay.[146] For an "in lieu" of tax to qualify for a tax credit it must be a fiscal charge comparable to that imposed on other persons in the same situation. It must not be directed against only those who receive an "economic benefit" such as oil operators.[147] The Refinery Throughput Tax did not qualify.[148] Hence, the P.P.T. and the S.R.T. combination would see the basic P.P.T. charge "use up" most of the tax credit for the companies.

The P.P.T. is imposed on taxable profits resulting in the year of assessment. In computing the taxable profits, special rules have been laid down which recognise

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146. See Petrol. Taxes Act, 1974, ss. 20, 21.

147. See I.R.S. Ruling 78-22.

148. This in spite of the Act itself saying:
"... the tax shall be deemed for all the purposes of the law, practice and treaties relating to the taxation of incomes and of profits and to taxes of a similar nature, itself to be a tax on profits."
See Petrol. Taxes Act, 1974, s. 20.

the separation of function between refining, production and marketing businesses. The Act provides:[149]

> "In computing the profits or gains of any person for a financial year from each of the several businesses charged to tax ... for the purpose of ascertaining the taxable profits of any person for that year, separate accounts as to the several separate businesses shall, as far as possible respectively be kept to the satisfaction of the Board ...."

Such separate accounting is in recognition of the separate tax structure and deduction rules which were introduced in 1974. It was also provided that "outgoings and expenses" wholly and exclusively incurred in the production of the profits or gains in each business were to be deducted separately. Hence, the refining sector, like the other sectors, has to compute its taxable profits in accordance with profits and losses resulting from only refinery operations.

A new safeguard has been introduced with regard to processing fees. Since most crude oil refined in Trinidad comes through processing agreements with affiliate companies, it is virtually impossible to establish the correct fees. As such, since the value of the processing fee is an important constituent in determining gross income for the purpose of corporation tax, there has been much tax evasion through the use of undervalued processing charges. This means that there was no proper relationship between actual

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149. Id., Sch. 2, s. 2.

refining cost and processing fees. This transfer pricing evasion can now be curtailed by ministerial action.

Under the law, the Minister has a right to substitute a fee if the company's fees are not decided on commercial principles. The Act states:[150]

> "Where processing arrangements for refined products are not at arm's-length, the Minister shall in consultation with the member of the Cabinet responsible for petroleum fix processing fees for tax purposes."

Hence, the fixing of processing fees is made an administrative determination in cases of non-arm's length transactions. The other measure used by the state was to set the S.R.T. rate quite high in order to regain lost revenue resulting from artificial processing fees, product prices[151] and yields which accounted for some 16 (U.S.) million dollars per annum.[152]

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150. Petrol. Taxes (Amendment) Act, 1981, s. 21(d); see also in section right to make representation to Pricing Committee and to have a ministerial review.

151. The processing fee averaged 15¢ U.S. approx. from 1975-77.

152. Processing fees averaged 15¢ U.S. from 1975-77 and yielded some 16 million dollars (U.S.) per annum. See Report of the Committee to Review Government Expenditure, Govt. of Trinidad and Tobago, 1978, pp. 34-37.

3. Taxation of Marketing Operations and Natural Gas

Marketing business[153] would involve the marketing outlets of the large multinational companies, the National Petroleum Marketing Company and local agents who buy and sell at the retail level and who would all be subject to the Petroleum Profits Tax at a 45% rate.

As with other petroleum operations, taxable profits are computed separately and independently of any other petroleum operations while expenses "wholly and exclusively incurred are to be deducted. A deduction which is allowed and which would benefit the multinational interest, is any sum paid as a levy under the Petroleum Production Levy and Subsidiary Act, 1974.[154]

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153. Petrol. Taxes Act, 1974, s. 2(1) defines this as:
"the business of dealing in petroleum and petroleum products by way of an acquisition and a disposal to a marketing licensee or to a consumer in Trinidad and Tobago or to a person in any other prescribed country, and includes bunkering of ships and aircraft by a marketing licensee, but does not include:
(a) disposal of petroleum by a person carrying on a production business where the petroleum disposed of is produced by such person; or
(b) disposal by a person carrying on refining business of
(i) petroleum products refined by such person;
(ii) petroleum products acquired and blended with petroleum products refined by such person,
where any such disposal is made to a marketing licensee, or to the refining business of another; or
(c) bunkering of ships ex-refinery wharf in international trade by a person carrying on a refining business."

154. See Petrol. Act, 1974, Sch. 2, s. 5(5) as restated in Petrol. Taxes (Amend.) Act, 1981, s. 21(d).

In the new regime of taxation, the price which is used in determining the gross income is the actual realised price for petroleum products and petrochemicals. However, since the state machinery controls the domestic marketing business, there is little chance that prices given would not be actual prices.

The taxation structure for marketing operations is a fairly simple one which follows the normal corporation tax provisions.

The natural gas industry is already in national hands with the National Energy Corporation (N.E.C.) as the holding company for the Natural Gas Transmission Company (N.G.T.C.) acting as the sole purchaser of natural gas. There is no international sale of this product and so the N.E.C. would provide the realised prices necessary for taxation purposes.[155] No S.P.T. would apply since it is a government-owned and operated company. Companies operating in the offshore areas may well be advised to make use of the incremental investment allowance[156] for the development of offshore gas fields. At the present time, however, there is no separate regime for taxing or providing incentives to gas operators more than an intention to provide a reasonable rate of return to companies involved in its development.

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155. See Petrol Taxes (Amend.) Act, 1981, s. 21(c)(d).

156. Id., s. 15.

TABLE XII: GOVERNMENT REVENUE FROM PETROLEUM SECTOR ($ MILLION) 1973-80*

CLASSIFICATION	1973	1974	1975	1976	1977	1978	1979	1980 May-June
1. Corporation Tax	57.6	656.5	989.9	1,094.3	1,371.1	1,301.0	1,749.9	625.5
2. Withholding Tax	1.8	2.3	8.3	11.6	11.6	14.3	23.1	3.2
3. Royalties	49.6	157.9	184.7	225.4	263.1	272.8	416.1	227.0
4. Oil Impost	1.6	1.9	2.7	2.5	3.2	4.2	5.5	-
5. Excise Duties	18.6	10.1	10.9	12.7	14.2	13.6	15.7	7.2
6. Unemployment Levy	14.5	77.9	104.9	119.7	174.0	176.8	230.1	-
7. Petroleum Production Levy	34.0	34.0	43.0	68.0	87.0	94.0	179.0	289.0
8. Processing Fees	-	33.9	28.1	42.8	36.3	36.0	36.0	36.0
Totals	142.8	944.5	1,332.5	1,577.0	1,960.5	1,912.07	2,665.4	1,187.9

*Compiled by Author

Note: (1) Sums based on T.T. Dollar
1 U.S. = 2:40 T.T.

(2) a 7.7% annual decline in income is forcasted up to 1983.

(3) Sources: (1) Report of the Committee to review Gov't Expenditure, pp. 37-39.
(2) Accounting for the Petrodollars, p. 1.
(3) Min. of Energy Speech, 1981, p. 26.

F. FOREIGN TAX CREDITS AND PETROLEUM TAXATION IN TRINIDAD AND TOBAGO

1. United States Tax Credit Law

Since most, if not all, of the petroleum companies operating in Trinidad are subject to U.S. taxation laws, it was necessary in drafting the local taxation laws to take account of U.S. guidelines for allowing tax credits. Local laws were to operate in a manner which allowed taxes paid by U.S. companies to be credited against their U.S. tax liability. It is intended to prevent double taxation.

In passing the new legislation in 1981, the Petroleum Taxes (Amendment) Act, the government was aware of the need to harmonise the local regime with international tax systems and to provide "equitable treatment for all petroleum companies". This, coupled with a need to have a law which did not have adverse economic effects on the companies, prompted consideration of the foreign tax credit provisions. In the words of the government,[157]

> "The non-qualification for foreign tax credit of income taxes paid in Trinidad and Tobago, will affect adversely the economics of those companies which may have subjected to double taxation. This matter has been the subject of extensive discussions during the past few years."

The rationale for the tax credit provisions is simply to avoid double taxation. Its more general aim is

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157. Min. of Energy Speech, 1981, op. cit., supra, note 30, p. 6.

is to encourage investments overseas while allowing the U.S. to have tax jurisdiction over U.S. companies operating abroad. More recently the revision of the U.S. tax credit provisions has prompted a new explanation. The disallowance of tax credit to companies operating in certain countries can be seen as an attempt to discourage U.S. investments in oil investment overseas in order to decrease U.S. vulnerability to economic sanctions imposed by producer countries. Also, it seeks to selectively discourage its investments in countries whose interest is seen as inimical to that of the United States.

In the United States, the Inland Revenue Service which is the agency entrusted with the responsibility for administering and enforcing the Inland Revenue code, has power to make rulings and regulations regarding foreign tax credits. Regulations have the force of law while rulings are interpretations of foreign laws which give a clear statement of the U.S. attitude. In looking at the U.S. position, in addition to the Inland Revenue Code, one has to look at these rulings and regulations.

The basis of the U.S. law is to be found in s. 901 of the I.R. Code which states that an American company may elect to credit against it U.S. taxes which represent "the amount of any income ... taxes paid or accrued during the taxable year to any foreign country". This establishes two requirements, first, the levy must be a tax and secondly, it must be on income. The other substantive provision

requires that the foreign taxes which may be claimed as credits, must not exceed the amount of the U.S. tax which would have been levied against the taxpayer's foreign income for that year.[158] In this case, payment of foreign taxes at a rate in excess of the U.S. 46% rate, would disentitle for a credit the entire amount paid as taxes. The U.S. approach then, seems to hinge on the application of a non-discriminatory tax imposed in a like manner to U.S. tax provisions.

The main thrust of the U.S. requirements are contained in Inland Revenue Ruling 78-222 released on 7th May 1978. This ruling sets out seven basic requirements all of which must be present in order for foreign paid taxes to qualify for U.S. tax credits. These are:[159]

(1) Payment to the foreign government should be comprised of income taxes plus other payments. These other payments to the state as mineral owner while taxes are paid in its capacity as a taxing authority.

(2) Taxes must be paid by the taxpayer, they cannot be paid by the government on behalf of the taxpayer.

(3) Separate and independent calculation formulas must be used for payments to the state as mineral owner from those in its capacity as taxing authority.

(4) Foreign taxes must be paid based on concepts similar but not identical to those in the U.S. In particular, a deduction should be allowed for "significant expenses" incurred

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158. Inland Revenue Code (U.S.), s. 904(a).

159. PL/Petrol. Taxation, Vol. 32, pp. 65-67.

or paid in earning the income. Hence taxes must be based on net income.

(5) Taxes must be imposed on income actually realised on an arm's-length basis. This excludes "post prices" or "tax reference" prices.

(6) Taxable income should be arrived at by consolidating all gains and all losses from all concessions. A calculation based on a non-combined system such as a well by well calculation would not suffice.

(7) Net gains and net losses from all concessions should again be combined with gains and losses in other activities carried on by the taxpayer. The ultimate tax income is then determined. (this should be read with (6) above).

The effect of these requirements is to create a system of taxation which, is similar at a conceptual level, to that in the United States. It would be based on an accumulation of income, taxation of net profits and a valuation on realised price. Surtax and royalty payments would not qualify if jointly determined with income taxes.

The Carter Administration sought to approach the question of tax credits from the conceptual standpoint. While retaining the substantive requirements of Inland Revenue Ruling 78-222, there was a revision which saw new regulations passed in 1980 but made retroactive to June 1979. Essentially the new system sought only to define "income tax" since this is the charge which was the basis of the credit.

An "income tax" is defined for the purpose of the tax credit as a charge imposed on realised income and one which allows recovery of significant expenses before it is

imposed. Where a company subject to tax obtains a "specific economic benefit," which means in this case a right to "win and save" oil, then no significant part of the charge should be compensation for this benefit.[160] This means no part should be a royalty. Hence the question for the petroleum company becomes one of distinguishing between a royalty and income tax.

This can be done by showing that no "specific economic benefit" was received or that the tax rate imposed on the oil company is not higher than that imposed on other companies or indeed that a royalty is payable separately from tax. The new regulations defined income tax on petroleum companies in such a way as to exclude royalty payment, surtax charges and made its rate and computation in line with those imposed under the general taxation law on all other companies. Also, taxes imposed "in lieu" of income taxes were also made to abide by these rules of non-discrimination.[161]

These new rules, while upholding the substantive requirements which were already in existence, sought to disqualify any higher rate of taxes or levies since they would not be considered as income tax but rather a surtax on net income.

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160. See PL/Petrol. Taxation, Supp. 68, pp. 57-59.

161. See Inland Revenue Code (U.S.), s. 903.

(2) Tax Credits: Case of Trinidad

The Petroleum Taxes (Amendment) Act, 1981 was introduced, inter alia, as a measure designed to introduce major changes in the local laws in order to allow U.S. companies to benefit from tax credits in their home countries.

The first important change was in the pricing policy. As shown, it was necessary for taxable profits to be calculated on the basis of realised price or market value in order to qualify as income tax eligible for a credit. The posted or tax reference price sytem as existed in Trinidad would not have been accepted since it constituted an artificial price. The reasoning used by the U.S. authorities was that O.P.E.C. related prices constitute a pure excise tax since they are based on fictitional receipts and so fictitional profits.[162] Realised prices, it was thought, would most truly reflect market conditions and so present a more accurate assessment of income tax liability.[163]

The fact that taxes were to be imposed on "net income" after deductions of substantial expenses in earning

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162. For an interesting explanation of this, see M.A. ADELMAN, "Is the Oil Shortage Real?" (1973) 9 Foreign Policy, 78.

163. See, I.R.S. Ruling 78-62 where "realises net profit" assessment is said to approximate U.S. tax practice by satisfying the "substantially equivalent" requirement of Inland Revenue Code, s. 901. (See also I.R.S. Ruling 78-63).

the income, was also provided for. Oil companies were allowed deductions for royalty payment, capital and operating expenditure, bonuses, and levies, together with other expenses which were "wholly and exclusively" incurred. The basis of the tax liability must be decided with reference to a realised net profit.

A major source of concern was the Supplemental Petroleum Tax since this constituted a tax above normal income tax. In addition, the Petroleum Revenue Tax (P.R.T) in the U.K., which was very similar in form, did not qualify for a credit.[164] These taxes, being excess profits taxes, were applied in addition to normal income tax and directed against petroleum companies. This meant that they did not satisfy the "equal treatment" test required by U.S. law. Therefore, in the absence of a special agreement these would not qualify for a U.S. credit. However, the S.P.T. is a deductible item in the computation of P.P.T. As such, although it cannot be used as a tax credit, it can be used, as it is, to reduce the income subject to P.P.T. Moreover, the P.P.T. is levied at the rate of 45% which allows it to take up the full deduction of the U.S. tax credit. This is because the U.S. corporation tax rate is 46% and no more than this can be claimed as credit in that country.

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164. It was later made creditable through a specially designed tax treaty.

The law also introduced changes to deal with the separation of royalty from income tax. Income tax was to be computed and charged separately from royalty. Under the then existing production sharing contract, the state paid the taxes of the contractor from its share of the production. This was taken to be a royalty payment.[165] The system was changed. Direct taxation was introduced through the P.P.T at 45% while royalty payments were made separately at a rate of 12½%. Such payments are now creditable.

The last area where significant changes were made was in relation to the consolidation of accounts. Taxes were to be computed on the basis of the taxpayer's entire operations within the foreign country. Separate accounting was not allowed.[166] However, indications are that the present licence by licence computation would be acceptable to the Treasury Department in tax computing.[167] This is providing the fields are of reasonable size and have normal prospects of bearing minerals. Moreover, there is a consolidation of accounting insofar as the petroleum company is able to set off losses incurred in its other businesses from its petroleum operations. In any given year of

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165. See I.R.S. Rulings 76-215 and 76-1638.

166. This was the case in Venezuela.

167. See Vol. 27, International Tax Service, p. 40.

assessment[168] such computation rules now allow local taxes to qualify under the requirements for combined accumulated accounting as required.

In addition to these adjustments there is an existing taxation agreement between the United States and Trinidad.[169] Although outmoded in form and relief it has succeeded in laying a foundation for investment. It provides a basis for reconciling two tax regimes by proposing resolutions on potential areas of fiscal difficulties. More importantly, it suggests an understanding in seeking to prevent any discriminatory treatment of overseas investors. Given such a framework, U.S. oil companies operating in Trinidad are given added incentive to invest for their locally paid taxes would qualify for a tax credit in their home country. It seems to be an unfair system for the U.S. to dictate the fiscal arrangements which should obtain in countries seeking petroleum development. The U.S. rules while ostensibly concerning themselves with the question of income tax are really addressing the issue of the high taxes imposed on U.S. companies. In the case of Trinidad there is no choice because the economy is inextricably bound to petroleum development by U.S. interest.

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168. See Petrol. Taxes (Amend.) Act, 1981, s. 21(b).

169. See Double Taxation Relief (U.S.A.) Order 1971, Supp. to the Trinidad and Tobago Gazette, Vol. 10, No. 2, 7 Jan. 1971.

TABLE XIII: CLASSIFICATION OF FISCAL CHARGES AND ALLOWANCES*

Financial Contribution by Government: Subsidies, Tax Credits	Profit Sharing	Sharing Net Income	Sharing Gross Incor
1. Exploration Allowance	1. Ring Fencing	1. Petrol. Prod. Tax	1. Petrol. Prod. Levy
2. Incremental Investment Allowance	2. Production Allowance	2. Unemployment Levy	2. Supplemental Petrol Tax
3. Enhanced Recovery		3. Production Sharing Contract	3. Royalties
4. Development Dry Hole Expensing			4. Production
5. Submarine Well Allowance			5. Production Sharing Contract (no cost recovery)
6. Carried Interest			
7. Land Production Allowance			

* Source: Compiled by Author.

TABLE XIV: FLEXIBILITY OF FISCAL CHARGES+

Adjustable Charges	Non-Adjustable Charges
1. Royalties**	Signature Bonus*
2. Supp. Petrol. Tax**	Production Bonus*
3. Petrol. Prod. Levy**	Petrol Profits Tax
4. Surface Rentals	
5. Ring Fencing Tax	
6. Unemployment Levy**	

* These charges are single payment charges, others are regular, usually annually.

** Variable by Ministerial discretion.

+ Source: Compiled by Author.

G. EVALUATION AND RECOMMENDATIONS

1. Administrative

The present administrative structure possesses the legal definition and scope necessary for a successful model. It contemplates a working relationship with both finance and energy sectors through its linkage to the Ministry of Energy and Finance. An important feature of its operation is the power given to the Minister to adjust taxes. This allows a flexibility which is required in the area of taxation. The Board of Inland Revenue itself possesses adequate power for enforcement, collection, recovery and the assessment of taxpayers' liability.

The main shortcoming of the present system is twofold. A lack of a facility for tax planning and forecasting and a shortage of specialised and experienced personnel.

In its present form, the Board's operation demands expertise in each of its technical sub-divisions. Specialist with experience in such areas as petroleum taxation, accounting and auditing would be a necessary addition. It is this lack of trained people which represents one of the serious shortcomings in the efficient operation of the present system.

The second area which is weak is tax planning. It is necessary that a unit be established to formulate policy, monitor the workings of the existing legislation and update local practices withthose in the international industry. In this way, a more functional and organic relationship can be established between fiscal planning and general development planning. This would

replace the existing system of "planning" only in times of crisis. Such a short term approach is not advisable. Rather, the suggested unit would provide on-going study, monitor international developments and present a continuity of approach in fiscal policy and planning.

2. Legal

In considering a model for reforming the existing taxation structure, one has to consider the basic interest of the state and the investor.

The state's interest is twofold. It requires full and complete development and realisation of resources and an optimum capture of economic rent including excess profit. The investor's interest is, inter alia, to have an attractive rate of return on capital and a recouping of invested money. Given these variables, one could venture to suggest a model which allows these interest to be satisfied and operates in an efficient manner.

Certain existing charges would have to be replaced. Since there is no cash flow problem in Trinidad given its enhanced financial standing through oil revenue, pre-production payments could be dispensed with. The signature bonus and surface rentals would be two cases in point. Further, certain other charges which represent levies on production could be amalgamated into an additional profits tax on excess profits. The levies which could be so amalgamated would be the Supplemental Petroleum Tax and production bonuses. This would mean taxation is posponed until profit is realised.

In the suggested model, the basic levies and variables used would be as follows:-

1. A basic corporation tax, such as the existing Petroleum Profits Tax (P.P.T.)
2. Royalty payment, as exist at present , at 10% of the field storage price of petroleum won and saved.
3. A Supplemental Progression Petroleum Tax on net profit after payment of a fixed rate of return.
4. "Ring Fencing" so taxes are levied on a field by field or licence by licence determination of profit.
5. Capital Cost allowances and cost recovery mechanisms in determining taxable profit.
6. "Norm Price" valuation in determining gross revenue.
7. A carried interest formula.

The system would operate as follows. A basic corporation tax would be retained in the form of the existing Petroleum Profits Tax (P.P.T.). It would be levied on gross income after allowable deductions and assessed on each company on income and expenditure from exploration and production on a field by field or "ring fenced" basis. This preserves the basic objective of the suggested system, which is taxation on the basis of profitability.

Current operating cost would be deductible. Capital expenditure and exploration cost would be allowed as deductions and can be accelerated in the event of a low cash flow period. This facilitates a quicker pay back period for initially invested capital which is a basic aim of the suggested model. It allows a financial liquidity to the investor in facilitating further development. However, expenditure on "dry holes" should not be underwritten by the state in its incentive programme for this represents a risk to be borne by the investor.

The second major suggested levy is the Supplemental Progressive Petroleum Tax, S.P.P.T. This is aimed at capturing excess profits earned from highly productive areas. It would belevied on after tax profit on a "ring fenced" basis. The S.P.P.T. would be progressive in that it would continue to increase until the state achieves a stated division of profit from the more productive field. This could be in the range of 86% to 14% in favour of the state. Any division used here should not operate to "sap the incentive" from the investor.

Since the S.P.P.T. would arise in the later life of an oilwell, allowable deductions would have been exhausted. Incentives can be given for further capital expenditure which directly increases production, as for example a secondary recovery program.

In order to safeguard the investor's interest and make the system of taxation more accurate, assessment should be tied to a fixed rate of return concept. For example, a marginal field to which the S.P.P.T. would not be applied, could be defined as one which yields a rate of return of say 15% D.C.F. In this way the profitability of the marginal field is preserved and the fiscal levies are directed at more profitable areas.

The P.P.T. should also be a tax which has a progressive character. It should increase with the number of times the investor has been repaid on the initial capital investment. So for example, the basic rate of 45% would be increased to 50% after two pay out times and then to 55% with two and one half pay out times and so forth. This would require a scaled formula, expressed in law. A total marginal rate would also be necessary.

The royalty which is suggested, would be retained as a minimum income from production. It represents a gross income payment. For the purpose of this discussion, the royalty is not viewed as a tax, strictu sensu, but rather as a payment for the use and depletion of a capital asset, which is oil. This would be deductible in calculating taxes.

The carried interest formula can be combined with the above tax structure. The major benefit of this mechanism is that it allows the state an opportunity to capture an enhanced economic rent equivalent to the investor's while developing the technological ability of the national oil company. It can be an exercisable option on commercial discovery.

Since it is proposed to monitor fields individually and to define profit in terms of stated arithmetical formulae, it would be administratively more expedient to use a computerised facility. The system would be more accurate and efficient and provide an up-to-date cash flow analysis information on a licence by licence basis.[169]

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169. This facility is available. See Petroleum Arrangements Cash Analysis Method (P.A.R.C.A.) owned and operated by Van Meurs & Assoc., Ottawa, ONtario, Canada.

In taking an overview of the system one can identify certain benefits of the suggested model. These include:

1. Preserves profitability of fields, for a bookkeeping rate of return is guaranteed.
2. S.P.P.T. would not apply to marginal fields.
3. The guaranteed rate of return would be available in spite of market and output fluctuations andso would be attractive to an investor.
4. State captures excess profits through the S.P.P.T. It also augments its take through corporation tax increases from accumulated pay out to the investor.
5. Allowable deductions are preserved to allow quicker pay back on invested capital.
6. It is favourable to the state in capturing a basic return plus excess profit and favourable to the investor for it allows cost recovery and a fixed rate of return.

As an alternative to this system, one can recommend a system of taxation which uses the contract as a mechanism for taxation. The particular model involved is the fixed rate of return service contract where the rate of return and cost recovery of the investor is defined. It allows recovery of a fixed rate of return through instalments plus a complete recovery of all investment and operating cost. The monthly and bi-monthly instalment payments would represent a defined rate of return on capital investted. Taxes would be paid on these. A useful example would be the Brazilian Service contract which defines the remuneration payable to the investor,

in a stated formula.[170]

In conclusion, one can make two additional proposals which can be used with the suggested taxation model.

First, deductions or tax breaks which are given in the form of returned capital should be required to be invested in the particular development or exploration activity for which it is given within a specified time, such as, five years from the date of relief. If not invested, the state should be reimbursed to the extent that this returned sum has not been utilised. This guarantees the proper functioning of the incentive programme.

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170. Remuneration is define as:

$R = (Q_1 X_1 + Q_2 X_2 + Q_3 X_3) P$

R = remuneration for services rendered by the contractor

P = the market price of Crude oil

Q_1, Q_2, Q_3 = the shares of the quarterly production Volume obtained in each Commercial field. It is a sliding scale basis.

X_1, X_2, X_3 = values between 0.0.0. and 1.0.0. or the percentages for the contractor

See 19.5, Service Contract For Petrol. Exploration with Risk Clause, Draft Copy. Provided by Petroleo Brasileiro - Petrobras S/A Ave., Pubublica do Chile 65, Lapa 20035, Rio de Janiero, Brazil

Secondly, a system of differential tax rates should be applied to reinvested profits and distributed profits. The former should be allowed a reduced tax rate so as to provide an incentive to increased development and exploration activities. Distributed profits only serves to divert needed capital away from petroleum operations and if so channelled and repatriated it should be be taxed at a higher rate by the state. An incentive of this nature is intended to generate more internal savings in realising more net income from taxation.

CHAPTER SIX: INTEGRATION OF THE PETROLEUM INDUSTRY INTO THE NATIONAL ECONOMY: PRESENT ATTEMPTS AND PROPOSED ALTERNATIVES TO INTER-SECTORAL DEVELOPMENT, DOWNSTREAM LINKAGE AND THE TRANSFER OF TECHNOLOGY

A. INTEGRATION OF THE PETROLEUM INDUSTRY INTO THE NATIONAL ECONOMY

Introduction

In a small open economy such as Trinidad's, it is necessary to integrate the petroleum sector development and revenue earning potential into the national economic development. This policy, in serving to broaden the industrial base, allows a capital importing oil exporter to effect a transition from a monolithic economic structure to one which affords a more balanced and sustainable growth.

This chapter seeks to look at the economic and legal mechanisms which are employed in integrating the petroleum sector into the national economy. The policy approaches to economic development are examined and suggestions are made on improvements in the legal mechanisms for the reform of the system.

Further, the administrative structure for implementing this integration is examined. Indications are that the centralisation of management under existing administrative structures would put a heavy strain on such services. The windfall oil revenue and mega project undertakings in petrochemicals would better be placed under a separate body capable of undertaking such financial and corporate responsibilities.

1. MECHANISMS FOR PETROLEUM SECTOR INTEGRATION: POLICY APPROACH

There are certain characteristic features which are evident in the present oil sector development policies. The policy shows the use of large scale public funding of a sectoral development policy based on natural gas and realized through the use of developed country technology. The policy can be broken down into three main constituents which are:

(a) A diversification of the economy through gas based industries.

(b) Use of equity joint ventures in realising the technology and skilled manpower needed for such diversification.

(c) A system of "Special Funds" for channelling capital into project-oriented sectoral development.

(a) Diversification

In undertaking economic diversification of the economy two approaches can be used, the "pure income" or revenue approach and the "integrative" approach. The former relies on the generation of large financial income from the oil sector in order to subsidise the economy and to fund sectoral development policy. Inherent in this approach is a separation of the revenue earning capacity of the petroleum sector from its ability to be used as a

diversifying mechanism in itself, through downstream processing. While used successfully in Iran, the tieing of economic diversification to energy earning has been shown to present problems in so far as it is dependent on fluctuating conditions such as energy consumption, prices, industrial growth in developed countries and energy substitution policies.[1] This approach can be contrasted to the integrative approach used in Mexico, where the crude oil itself was processed and industries were built around this processing. Here, existing revenue from the oil sector is used to develop the potential of the sector itself in creating more backward and forward linkage with the rest of the economy. There is less emphasis on instant mega project type development rather more downstream and capital goods development takes place. The full potential of energy raw materials is sought to be realised because goods are not exported in a raw or intermediate stage since there is a policy to have value added locally.

In the case of Trinidad, the Government has embarked on a policy similar to the "pure income" approach. With tremendous revenue being derived from the oil sector, it is seen as a revenue earner which provides the capital needed to develop certain gas based industries. As a result, high levels of production and refining are to be maintained over the next ten years in order to undertake

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1. See State Petroleum Enterprises in Developing Countries, Published for U.N. by New York Pergamon Press, 1980, p. 176.

what is the Caribbean's first energy based industrial development programme. The selection of gas based industries was due to the tremendous reserves which the island possesses,[2] and its status as the "only other significant and commercially exploitable natural resource capable of generating revenues of the required magnitude ...".[3]

The intention behind the diversification programme is to create an economy which is not as dependent on oil revenue and one which possess a broader industrial base. In the words of the Government, it is the intention to fund the "long term restructuring and diversification of the economy" which would "accelerate the diversification of domestic production to create more foreign exchange earning activities, additional jobs and income, and to reduce dependence on oil per se".[4] The main thrust of the industrial effort is to use natural gas as a chemical feedstock for the manufacture of ammonia, chemical grade methanol and the reduction of iron-ore and as a feedstock for energy based industries such as liquified natural and full grade

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2. See D. O'CROLL, "Bright Future for Natural Gas", (1977) 44 Petroleum Economist, pp. 486-87, where it is stated "while proven oil reserves (at least 650 million barrels) represent no more than eight years production, even the official figure for gas reserves at 4 trillion (million million) cubic feet is equivalent to 120 years of consumption at the present low rate of 90 million cfd."

3. See White Paper on Natural Gas, Govt. of Trinidad and Tobago, 16 Jan. 1981, p. 2.

4. Budget Speech, Govt. of Trinidad & Tobago, 1976, pp. 9-10.

methanol.[5]

In terms of the actual industries there is to be:

1. An Iron and Steel Company producing sponge iron, steel billets and wire rods using a "direct reduction" system involving natural gas.

2. Two ammonia and fertilizer companies, FERTRIN and TRINGEN.

3. An aluminium smelter which makes aluminia to aluminium.

4. Liquified Natural Gas Company to produce L.N.G. for export.

5. A methanol project which produces chemical grade methanol (methanol is used in the manufacture of chemical products such as formaldehyde and acetic acid.)

6. Urea Project, to be undertaken after on by using carbon dioxide to upgrade ammonia to produce urea.

TABLE XV: Diagramatic Illustration of type and Size of Projects Undertaken

	Type of Partnership	Cost	Employment	Selling Price	Production Capacity
Aluminium	Joint Venture with National Steel and South-Wire Aluminium Gov't hold 51%	1,100 Million	2,500 (temporary) 1,200 (permanent)	63.0 U.S. per lb.	180,000 tons per year
Methanol	Gov't owns 100%	320 Million	450-650 (temporary)	$90-$100 U.S. per ton	1,200 metric tons per day
Urea	Joint Venture with AGRICO Co. (U.S.): 51%:49%	288 Million	300-500 (temporary) 50 (perm.)	$110-$130 U.S. per ton	1,600 metric

5. See White Paper on Natural Gas, op. cit., supra, note 3, p. 6.

L.N.G.	Joint Venture with Tenneco and Peoples Gas (U.S.) 51%:49%	6,000 with tanker fleet	N.A.	450 per MMBTU, i.e. 3-4 times price of oil	N.A.
Fertrin (Ammonia)	Joint Venture with Amoco. Oil Co. 51%:49%	759 Million	1,500 (temp.) 200 (perm.)	$90-$110 U.S.	1000 tons per day
TRINGEN Fertilizer	Joint Venture with W.R. GRACE & Co. 51%-49%	264 Million	900 (temp.) 150 (perm.)	N.A.	1000 tons per day
ISCOTT (Iron & Steel)	100% owned by Gov't	840 Million	1000 (perm.)	N.A.	4,500 - sponge iron 750,000 - steel billets 720,000 - wire rods

Source: Compiled by author

In all cases the products are to be marketed in extra-regional markets particularly the U.S. Also, production of methanol, urea, ammonia and sponge iron, roads and pillets all represent only an intermediate stage of processing.

While these new gas based industries are the mega-project undertakings in the present diversification policy, there are some existing industries which show some diversification in both the oil and gas sectors. Federation Chemical Co. Ltd., a subsidiary of W.R. Grace & Co. produces ammonia, sulphuric acid, ammonia sulphate, carbon-dioxide and urea as products from natural gas. The greater part of these products are exported to the U.S. while such

items as liquid ammonia are processed locally.[6] In the oil sector, certain primary and intermediate products are produced such as kerosene, gasoline, fuel oil, aviation fuel, lubes and greases. Also, "building blocks" such as benzene tonlene, cyclohexane and exylene are produced but are exported.[7] One finds that there is no policy to further diversify the oil based petrochemical sector although these "building blocks" can be made into a range of products from plastics, to rubber, nylons and other synthetics.

A petrochemical diversification programme can be built on natural gas or oil or both. The present diversification programme is built on natural gas development but it is also possible to build a programme on oil sector development given the resources in Trinidad. A petrochemical industry can be developed from certain basic "building blocks". These are derived from natural gas or certain refinery by-products while others are obtained from the major oil "building blocks", which constitute the "olefin" group. Oil based olefins are ethylene, propylene or butadiene while gas based olefins are methane, ethane, propane and butane. Methane produces ammonia and methanol. There are also "aromatic" building blocks derived from the naphtha in the oil refining process which produces benzene,

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6. Federation Chemicals Co. Ltd. benefits from tax exemption and fiscal incentives under the Nitrogenous Fertilizers Industry (Dev.) Ordinance, 1958.

7. See Annual Administration Report, Ministry of Petroleum and Mines, 1976, p. 16.

toluene and xylenes. However, in Trinidad, large quantities of high octane petrol is produced and the more high octane gasoline produced the less naphtha is obtained. The olefins can be made into a host of products including films, polyester fibres, rubber, nylon and plastics. The aromatics can be processed into products including synthetic fibres, paints, insecticides and explosives among others. The present policy in Trinidad seeks to explore the olefin potential of mainly methane and to a lesser extent propane.[8]

From the present and existing diversification efforts one can draw certain conclusions which show the main patterns of development. These indicate:

1. A heavy emphasis on large capital intensive industries with a bias to ammonia and fertiliser production.

2. Production of petroleum and gas related products only to an intermediate stage. Major hydrocarbon fractions are left in products which are exported.

3. A reliance on extra-regional markets for export sales.

(b) Use of Joint Ventures

In venturing to carry out its economic development

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8. Trinidad's natural gas contains the following methane levels:

Associated Gas	89:72%
East Coast Dry Gas	92:77%
North Coast	99:40%

See White Paper on Natural Gas, op. cit., supra, note 3, Appendix III.

policies for the integration of the petroleum sector into the economy, the Government has used the equity joint venture form of company. The main reason for using this form, aside from obtaining technology, skills and marketing outlets, seems to have arisen from a need to obtain adequate financing. The announced policy stated:[9]

> "the country needs foreign direct investment not so much because of the finance involved as because of the access that this type of investment provides to management, know-how, training in skills, technology and, in certain cases, overseas markets. It is only in the case of very hevy capitalised industries - particularly oil and petrochemicals - that the provision of initial finance becomes as important as the provision of management, know-how, and training in skills and technology in giving rise to the need for foreign direct investment."

Indeed if Trinidad were to develop its gas-based industries on its own, it would experience serious balance of payment problems.[10] The use of the joint venture appears to have been a wise choice both from the financial and technical

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9. Announced Energy Policies of Government of Trinidad and Tobago, 1979, p. 3.

10. Total cost of initial gas related investment would be in the range of $7,223 million while infrastructual developments would add another $200 million to this cost. See National Energy Corp. Report (1979), p. 33. It is estimated that steel, fertilizer, methanol and urea projects would generate some $3,600 million or $725 million per year. Annual debt servicing cost on the $1,665 million borrowed would reduce this $725 million to $400 million per year. Indications are that balance of payment problems will still arise. ISCOTT, the iron and steel company which was forecasted as providing $1,224 million between 1982-86, has lost $398.7 million in its first year with projected losses of $500 million by 1985. See "Mr. Chamber's First Year", (1982) 10 Caribbean Contact, No. 7.

point of view. It represents a middle position between wholly owned foreign subsidiaries and pure technology leasing contracts.

The choice of contracts available in petrochemical development could be narrowed to two, the joint venture, or "turn-key" contracts. The "turn-key" contract is where a supplier provides all technological requirements but the operations in the post-construction period is left to the state. Libya and Algeria have used this approach. Algeria, in SONATRACH, possesses a very active and successful state petroleum enterprise which has been able to build an indigenous technology. On the other hand, the joint venture approach has been used in Saudi Arabia and Iran among others. This is the more cautious approach which relies on the foreign interest creating an inflow of technology and managerial skills. Trinidad has very little local talent for building or running a petrochemical complex plus there was a need for investment capital thus the joint venture became an automatic choice. The foreign investor brought basic and detailed engineering know how, product and process technology, plant instructions and design plus initial and post-installation operation's skills. Local agencies provided civil construction and ancillary infrastructural services such as electricity,

water, power and some civil engineering.[11]

The Trinidad joint venture sees a joint operating company in the form of a limited liability company incorporated locally. Operations are conducted in accordance with the articles and memorandum of association and an operating agreement between the parties. Directors of the board are appointed by both parties. As a means of protecting the foreign investor and making their participation meaningful, a two thirds vote of the directors is usually required in certain important decisions. These relate to such thing as variation of rights and issue of additional shares,

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11. A breakdown of one of the contracts would provide an indication of the involvement of the foreign investor. The example taken is the FERTRIN (fertilizer) Company Ltd. which is a joint venture between the state and Amoco Int. Oil Co. Breakdown of services:

1.	Field Construction and Erection	- Kellogs General Contractor (foreign)
2.	Purchasing Services	- Amoco Tech. Assist. Co. (foreign)
3.	Technical Assistance	- Amoco Tech. Assist. Co. (foreign)
4.	Marketing Agency	- Amoco International Sales Co. (foreign)
5.	Engineering Contract	- Pullman Kellogg (foreign)
6.	Construction Contract	- Pullman Kellogg (foreign)
7.	Gas Supply	- National Gas Co. (local)
8.	Engineering Services	- Lee Young Assoc. (local)
9.	Electricity	- Trinidad and Tobago Electricity Comm. (local)
10.	Architectural Contract	- Reep, Fojo, Holder (local)
11.	Water	- Water and Sewage Authority (local)

See N.E.C. Annual Report, 1979, p. 15.

investments over a certain sum, e.g. $500,000, amendment or termination of management contracts involving the foreign investor, mergers and dissolution or liquidation of the company.[12]

An equity joint venture allows the foreign investor ownership rights and access to local markets. Also, depending on the distribution of power in the agreement it does not mean that a 51%:49% majority share allows the state a more important decision making voice. Hence, the equity joint venture should not be instituted in a permanent manner but rather designed to promote its gradual assimilation into the economy and its replacement by local personnel. Foreign investment should be seen as allowing the acquisition of technology and skills but not as acquiring ownership rights in return.

(c) Special Funds for Development

The increased oil revenue saw the creation of a series of special funds to finance the massive public investment undertaken and to distribute these windfall sums into sectoral projects. It is symptomatic of oil based economies for urban capital intensive projects to be undertaken while rural development of support industries such as

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12. See for example, s. 89 Articles of Association, Trinidad-Tesoro Petrol. Co. Ltd.

agriculture and fishing to suffer. These funds were intended to redirect funds to these sectors while seeking to manage the large inflow of capital into the economy. As the budget speech states:[13]

> "The link between the petroleum sector and the rest of the economy is through the fiscal operations of Government which obtains almost two-thirds of its current revenue from taxation of the oil companies."

In economic terms there is a logic in the creation of these funds. Too much money in circulation would serve to destabilise the economy and fund creation would operate to control spending, regulate inflation, tighten the money supply and direct such accumulated sums into non-consumption spending.

The funds which are created include:

1. Petroleum Development Fund.[14]

This fund was established in 1974 as one of the sectoral development funds for undertaking development in the petroleum sector. A major portion of the original fund went into the purchase of Shell Trinidad Ltd. holdings. Substantial amounts have also gone into the national oil company, fertilizer joint venture, natural gas pipeline

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13. Budget Speech, 1980, p. 9.

14. This stood at 235,028.2 million as of 31 December, 1979 with 892,545,600 million having ben drawn. See Accounting for Petrodollars, T.T. Govt't Printery, 1980, p. 6.

construction, steel and aluminium ventures. The main purpose of this fund is to aid the capital investment undertakings in the development of the gas based industries.

2. Food Development Fund.[15]

In creating this fund it was intended to provide financial development assistance to the agricultural sector and projects therein, to ensure that petroleum sector developments in the agriculture holdings did not lag behind. It seeks to promote food production, marketing, improved processing and the sugar industry. The fund is also intended to finance a Food and Agriculture Corporation which is a large fruit and vegetable producing venture.[16]

3. Fisheries Development Fund.[17]

The depleting fishing industry was in need of a boost through financial assistance. Also, the lure of the offshore oil developments saw a divergence from the traditional subsistence means of livelihood. This fund[18] provided assistance to the National Fisheries Company, fish

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15. This stood at 5,576,000 as of 31 Dec., 1979 with 50,511,000 million having been appropriated. See Accounting for Petrodollars, 1980, p. 6.

16. See Budget Speech, 1981, p. 5.

17. This stood at 34,753,100 as of 31 Dec., 1979 with 48,696,000 having been withdrawn. See Accounting for Petrodollars, 1980, p. 6.

18. In Norway, there is a similar fund but it is funded by the oil companies as a fee for the lost of fishing grounds. It is worth about 45 million kroner per year.

processing, boats and marketing operations among others.

4. Industrial Sites and Services Fund

This fund was established in 1975 with a target sum of $100 million which would be used to finance the development of an industrial estate in which to base the gas related industries. The estate, called the "Point Lisas Development", covered zone eight square kilometers and provided adequate facilities for port, water, roads, electricity, bulk cargo handling and solid waste disposal among other things. Its present cost exceeds two hundred million dollars and is the largest infrastructural project undertaking in the country's history.

In theory the idea of the special funds is appealing asd a way of project financing. However, in practice, they have been criticised in one major study as providing "an uncoordinated sectoral strategy project approach to development".[19] The study identifies the shortcoming of the "fund" approach as an administrative one since in its present form it does not facilitate proper financial management and scrutiny. No proper relationship has been established between overall economic and financial planning and fund allocation and expenditure. As such, policy formation and implementation is not directly related to the

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19. See An Appraisal of the Government Financial Management System in Trinidad and Tobago, prepared by the International Monetary Fund, 22 Aug., 1980, p. 3, hereinafter referred to as I.M.F. Financial Management Report.

financial requirements for their undertaking.[20]

It would appear that there is need for a body in the form of a petroleum development corporation to which some of the responsibilities for financial management and sectoral strategies would be "hived off" to ease the burden on the present administrative structure. Such a body would also facilitate a more efficient and meaningful relationship between policy implementation and project financing.

Conclusion

The policy of the state for integrating the petroleum sector into national development is based on three approaches, diversification, use of joint ventures and special funds. Diversification permits the creation of large scale industrialisation of the sector which broadens the industrial lease of the country. Joint ventures allow foreign technology and capital to work alongside local participation in realising sectoral development and bringing a transfer of technology. Special funds serve to redirect petroleum income into these developments by undertaking project financing.

The outstanding feature of the present policy is the attempt to funnel petroleum revenue earnings into large industrial capital intensive projects to effect a growth

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20. See "IMF Financial Management Report", pp. 3-8.

and expansion in the national economy. This has created a commitment to large scale pulic spending in the project and infrastructural sectors. As a result the fiscal and economic management systems have found themselves shouldered with mammoth responsibilities and in some cases, the effectiveness has been questioned.

2. Linkage

A diversification effort is part of a larger attempt which seeks to provide a linkage between a particular sector and the rest of the economy. Hence linkage of the petroleum sector to the national economy would see the state involved in all phases of production and processing of petroleum products. There are two types of linkage, "backward" and "forward". The former involves more local industry input into production and so requires a large capital goods sector. "Forward" linkage would require local industry processing of extracted raw materials in order to obtain the optimum benefits of these products as well as national participation in all phases of "downstream" activity such as refining, transport and marketing. In this sense, linkage involves the economic benefits derived from intersectoral relationships.

Both backward and forward linkage offer economic benefits. The more local "value added" would mean more import substitution, foreign exchange saving and in turn

infrastructural development and diversification. This would render the local economy less "open" to metropolitan economic fluctuations.

It is now proposed to look at the obligations created in law, current practices and government policies in seeking to have "backward" and "forward" linkage.

(a) Backward Linkage

This exists when there is a large supply industry which provides raw materials services, manufactured products and energy which go into the making of final products. It involves also the use of local contracting and purchasing of domestic petroleum services in exploration, exploitation and production. However, foreign firms are usually reluctant to use local goods and services for in addition to inflating their cost of production, they prefer established business contacts where the technology price and quality is familiar.

In a highly capitalised industry which offers limited job creation,[21] it is the expansion of the capital goods sector which really offers employment. A good example of a country which has succeeded in developing its

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21. It is said that each job in the petrochemical industry costs between $20,000-$100,000 to create. See U.N. Doc. UNIDO Pub., The Petrochemical Industry: Perspectives for Industrial Development in the Second United Nationals Development Decade, New York, 1973.

capital goods sector is Mexico which contributes more than one-half its requirements. It has a developed service in logistical support, material supply, equipment supply and has made some headway into scientific support services.

In Trinidad, the situation is different. There is little backward linkage with the rest of the economy. A logistical support service exists for delivery services and some progress has been made into material supply services such as well loging and servicing. However, these tend to be locally resident companies of foreign operators rather than purely local companies. . An obligation exists in the production sharing contract to use local goods and services, it states that the contractor should:[22]

> "give preference in the purchase of goods and services to those goods and services which are available in Trinidad and Tobago."

However, this is only a request to "give preference" so the use of local goods and services remains up to the contractor's discretion. Indeed with the attractiveness of having duty free concessions on the import of equipment, materials and supplies[23] and the right to advance "all necessary funds ... for payment in foreign exchange to third parties who perform services as contractors,"[24] it is unlikely that local goods and services would be used in preference. In

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22. Model P.S.C., s. 12(9).

23. See Summary of Model Production Sharing Contract Proposed, 1974; Trinidad, Petrol. Concessions Handbook, Supp. 31, p. 65.

24. Model P.S.C., s. 12(c).

addition, there is no evidence of foreign investors being obliged to provide assistance or promote the development of indigenous industries in the capital goods sector.

Backward linkage of the petroleum sector to the national goods and services sector should be promoted in all petroleum development contracts. The use of local goods and sub-contracting expertise should be made compulsory providing certain competitive criteria are fulfilled. Duty free concessions for materials can be made conditional on a first preference for similar quality local materials. In joint ventures for processing and gas based industries, contractual eligibility should be tied to the development of local entrepreneurialship. Indeed, such an approach has already been considered in the case of liquified natural gas projects where fabrication of offshore platforms and foundry and casting facilities were considered.[25]

(b) Forward Linkage

Forward linkage is essentially concerned with the amount of value added to raw materials by local industries. In economic terms this is usually measured by the "net output" or the difference between the value of the end product and the initial product.

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25. See Budget Speech, Govt. of Trinidad & Tobago, 1978, pp. 9-10.

It is now intended to look at certain aspects of downstream products such as processing, transport and marketing which can be considered as part of the attempt to increase local value added. It is also intended to look at the undertakings in realising an energy intensive agriculture sector which is also an aspect of forward linkage.

(i) Processing

It is said that one single barrel of oil can produce six times its value if made into plastics, and if further processed into polyester film or agricultural chemicals the value can be enhanced by fifty to one hundred times.

The present position of the law and state policy suggest that Trinidad is still seen as a producer of raw materials for export to metropolitan countries rather than as a centre for petrochemical processing. The facts which support this view could be narrowed to three points.

First, oil producers are allowed to export their oil in its crude state without any obligation to feed a percentage to local refineries in spite of current throughput shortages.[26] Secondly, the major "building blocks" of

26. See Petrol. Reg., 1970, s. 32, which states:
"... a licence shall have the right to export all petroleum, petroleum products and petrochemicals won, saved or manufactured from the licensed area and to sell the same whether in Trinidad and Tobago or abroad."

the oil sector, the "olefin" and "aromatic" group, are exported in their basic or intermediate stage without further processing. The recently created gas based industries also venture to process only to the intermediate stage. Thirdly, the refining sector is linked to a metropolitan export market which demands the production of "bottom of the barrel" residual fuel oil which involves only elementary processing. Petroleum is still seen as a fuel rather as a raw material for chemical production.

The reasons for this policy can be attributed in part to minimal legal obligations on the investor and also to the tariff and transport costs involved if more processing takes place. A crude oil operator is placed under an obligation to erect a refinery if production reaches 100,000 barrels per day.[27] This is the sole obligation placed on the investor in terms of the creation of processing facilities. A non-enforcement of this obligation, as has been the case with the Amoco Oil Co. (Trinidad) Ltd., would mean a lost opportunity for establishing facilities on "terms and conditions as the Minister may ... consider necessary".[28] The reason for non-enforcement may be due to its financially onerous nature. Nevertheless, such an obligation could have afforded an opportunity for negotiating a complex which would have utilised the "olefin" and

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27. Id., s. 51.

28. Id., ss. 23, 51.

"aromatic" potential for existing refineries. Another legal obligation which deserves mentioning is the one placed on holders of refining and petrochemical licenses to:[29]

> "give preference in his operation to the processing of indigenous petroleum and to the manufacturing of such petroleum products or petrochemical products or both as are required for domestic consumption."

With the nascent local marketing indicating the potential for such products as synthetic rubber for motor car types and tubes, man-made fibres such as polyester, acrylic and rayon and other items such as paint, insecticides and detergents, this may be a potentially usable obligation. However, it is only an obligation to "give preference" and not to actually produce the products in question, this could provide an escape clause should the state decide upon its use.

These indicate the obligations placed, by the law, on the investor to reinvest in the local economy for the processing of items. One obligation which can be interpreted as a processing requirement, is the right to call upon the investor to "have refined in Trinidad and Tobago up to one hundred per cent of the crude oil produced by him", if refineries have available space.[30] This could be interpreted as an "export quo " on crude, which is a

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29. Id., s. 43.

30. Id., s. 54.

a technique used to encourage local processing. However, since it is important to the foreign oil company to feed its own downstream refineries with local crude, this would make the state very reluctant to enforce this obligation. In fact it has not been used. Clearly, the legal mechanisms for processing are tenuous and given the state's reluctance to use available ones, local processing remains a remote possibility.

An important disadvantage to local processing is the present tariff structure which exists around U.S. and European markets. Presently, local crude and semi-refined products such as fuel oil enter the U.S. markets at tariff rates ranging from ½% to 6% while refined petrochemicals carry rates in the range of 15%-10%. Rates as high as this can operate to make projects marginal in their profitability and unattractive to investors. One oil company in Trinidad has in fact indicated that "U.S. trade barriers are tending to inhibit the importation of refined products as distinct from crude oil."[31]

Protectionist markets created by high tariff charges, perpetuate an underdeveloped petroleum processing

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30. See Best Uses of Petroleum Resources, op. cit., supra note 47, ch. 1, p. 13. In one report some existing rates were as follows:

Ethylene Dichloride	÷ 21%
V.C. M	÷ 15%
High and Low Density Polyethylene	14%
Ethylene Oxide	÷ 13%

See L. TURNER, A Study of Saudi and Iranian Downstream Investments, London, Saxon House, 1979, pp. 94 and 106.

industry in Trinidad. It highlights, however, the need to create an intra-regional processing and marketing industry since a free trade zone exists within the region and studies have indicated the viability of regional projects.[32]

Transport costs can also be very expensive in the petrochemical and refined products market. A small island is not able to operate national tankers and "national flag" ship because of the tremendous cost of such vehicles. The value added through transport can be very high and so the need for linkage with this sector of operation is very important. As would be shown later, it may be possible to overcome transport costs through joint venture operations.

(ii) Transport and Marketing

In looking at the question of forward linkage one has to consider transport and marketing which are two areas of "downstream" activity.

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32. See S. DE CASTRO, "A Technological Policy for Petrochemcals in CARICOM", (1979) 28 Social and Economic Studies, pp. 282-336. For an assessment of the Caribbean petrochemical industry and potential some fifteen years before, see H. BREWESTER and C.Y. THOMAS, The Dynamics of West Indian Economic Integration," 1964, pp. 213-241. De Castro concludes as to the status of the industry, that "the petrochemical production in the region is still basically where Brewester and Thomas found it more from 10 years ago."

Transport cost of petrochemicals is both expensive and value adding. If a state has control over the transportation of its products, it is able to see more local value added and also to cut freight charges which may otherwise render processing a venture of marginal profitability. As a rule of thumb, it is estimated that Liquified Natural Gas (L.N.G.) is 6-8 times the cost of crude to transport while ammonia and Liquified Petroleum Gas (L.P.G.) are 3-4 times as expensive.[33] In ascertaining the percentage of value added, one can look at the case of iron ore, which is produced in Trinidad as a gas related industry. It is estimated that as much as 20%-60% of c.i.f. price may be added by transport cost.[34] While the need exists for linkage to the transportation sector, it is understandable that a small economy cannot shoulder the financial cost of underwriting a national tanker line.[35] Consequently, transportation overseas is often placed in the hands of the investor and local petroleum and petroleum products are sold "F.O.B. Trinidad."[36] Sea transport in

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33. L.P.G. costs as much as $7-$11 for each 1,000 miles. L.N.G. costs approximately 52¢-60¢ freight per Mcf over a 3,000 mile distance. See A.P.H. VAN MEURS, Modern Petroleum Economics, 1982, pp. 152-3, 164.

34. See The Maritime Transportation of Iron Ore, U.N. Doc. TD/C/C.4/105, p. 102, 1974.

35. For example, a 125,000 cub. met. capacity L.N.G. tanker cost in the range of 125-150 million dollars (U.S.). See A.P.H. VAN MEURS, Modern Petroleum Economics, op. cit., supra, note 33, pp. 152-153.

36. Local road and pipeline transport exist and is undertaken by locals.

internal waters by ship and tug is also capable of being handled locally but recently the marketing company has had to rely on a "time charter of a while oil tanker with foreign crew."[37]

A policy of forward linkage necessarily involves more local control and participation in all phases of operation. Lately, it would appear that the state has taken some steps towards establishing participation by seeking joint ventures in shipping. This is evident in the gas related industries. In the area of transportation of liquified natural gas, which is a very expensive industry to enter, the Principles of Agreement between the Government of Trinidad and Tenneco and Peoples Gas states that:[38]

> "L.N.G. will be transported to the United States markets in a fleet of L.N.G. tankers, each of approximately 125,000 M^3 capacity. The fleet may be owned jointly by the Government and the Purchaser."

It is proposed to have three 125,000 M^3 tankers which would make for a one-half million dollar investment. Should such a venture materialise it would allow the state access and control over a shipping facility and with proper training programmes a national capability could begin to exist. Similarly, in the case of iron-ore a government to government iron-ore sales agreement has been reached with Brazil.

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37. See National Energy Corporation Annual Report, 1979, p. 46.

38. Id., p. 12.

Docenave, the national shipping line of Brazil is to transport fifty per cent of the ore. There are on-going talks for Docenave, one of the largest shipping lines in a developing country, to be involved in a shipping joint venture for bulk cargo such as fertilizer and ammonia to Brazil and other ports.[39] Indeed, the establishment of a national shipping line could be a large foreign exchange earner with the heavy flow of petroleum and petroleum products to and from the island.[40] In order to take advantge of this, transportation of all or a stated percentage of locally produced goods should be made to travel on this national line. The use of a government to government or government to investor joint venture can be a first step to local control over transport.

State control over the marketing of petroleum and its products has the benefit of developing a national "know how" in this area. It also means that the state is able to have a say in sales commissions, pricing and transfer pricing.

Present policies indicate a reliance on the investor's marketing outlet in the international market.

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39. See Minister of Energy Speech, 9 Mar. 1979 on "Industrial Development Policies," Mimeo, Min. of Energy.

40. It is estimated that 15 million tons of crude oil are exported annually from the Middle East, Venezuela, Nigeria, Ecuador, Indonesia and Columbia to Trinidad. 4-6 million tons of crude oil and 20 million tons of petroleum products are exproted to U.S. and Western Europe.

Companies operating in the petroleum development area are selected on the "willingness and ability" to market the state's share of petroleum and to act as the sales agent of the state, if requested to so act.[41] In the recently developed gas industries, reliance is also placed on the marketing outlets of the foreign joint venture interest. For example, in the case of ammonia an Ammonia Sales Agreement with Aruba Chemicals Industries, a subsidiary of W.R. Grace, has been entered into for the sale of the product "F.O.B. Trinidad". W.R. Grace is the foreign joint venture interest.[42] It is natural for such marketing to be relied upon since a major share of petroleum marketing is done through inter-affiliate transactions of large vertically integrated companies.

Some attempt has been made towards developing a local marketing capability. A National Petroleum Marketing Company, which is a fully state owned company, handles local marketing of petroleum, petroleum products plus marine bunkering, aviation refuelling services and chemical sales. At the international level, the national oil company, TRINTOC, has its own marketing division which exports mainly to the Uited States. An International Marketing Company assists with export promotion. In order to provide

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41. See Model P.S.C., s. 9:4 and Petrol. Reg. (Competitive Bidding) Order, 1973, Sch. 2, s. 3(g).

42. N.E.C. Annual Report, p. 56.

these outlets with crude oil, the state has sought to reserve certain rights to locally obtained oil. In the production sharing contract, the taxes of the investor are paid in the form of crude oil while a designated portion of production is allocated to the state. Royalty payments, which are 10%-12% of the "field storage value" of crude, could also be taken in kind upon requisite notice being given.[43] Moreover, in the recently concluded Mobil P.S.C., the state has reserved a right regarding crude[44]

> "to be free to export in pursuance of Government to Government arrangements, and exchange arrangements whereby Minister may export petroleum in exchange for imported oil or products required for local refinery or consumption."

The retention of the above right is in view of the investor's right to "first refuse" any crude the state may wish to sell.

While some progress has been made to develop a marketing ability through the national oil company, the process is slow. Joint marketing structure should be encouraged as well as shorter contracts. Present exploration and exploitation contracts which give marketing rights, last for an initial twenty five years. State marketing outlets should have a right to purchase a

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43. Petrol. Reg., 1970, s. 32.

44. See P.S.C. between Mobil Expl. Trinidad Ltd. and Minister of Energy, 1 July 1980, Vol. 52, Petrol. Concessions Handbook, p. 79.

percentage of locally produced crude to "feed" its outlets. In the gas related industries, as well as the crude oil sector, it is possible to have long term supply contracts and purchase agreements with buyers. This is especially true of L.N.G. export sales.

(iii) Agriculture

Local linkage of the energy sector to food and agriculture production has taken two forms. First, through development capital injection and secondly, by making available locally petrochemical products which assist the agriculture industry.

The Food and Agriculture Fund was used to provide loan capital, industry subsidies and infrastructure development in the agriculture sector. A proposed Food and Agriculture Corporation, as outlined earlier, is also a result of the fund's sectoral development programme. However, the most attractive incentive is a tax write-off. A petroleum operator is allowed to set off against his petroleum operations, any losses in other businesses carried on by him, in arriving at the taxable profits.[45] This was intended originally to apply to farming operations but since the expanded relief to "any business", it would

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45. See Petrol. Taxes Act, 1974, Sch. 2, s. 3(2) as amended by Petrol. Taxes (Amend.) Act, 1981.

appear that it is seen now as an opportunity to reinvest in the local economy.[46]

Even more potential exists for realising an energy intensive agricultural sector. A National Agro Chemicals Co., producing mixed and blended fertilizers exists as a wholly state owned venture.[47] Local production of fertilizers, ammonium sulphate together with insecticides and pesticides from the Federation Chemicals plant has assisted with local agriculture production. Indeed, potential exists for developing the use of natural gas in agriculture processing industries. In such ventures as the animal feed and vegetable protein in soya beans. Further, a very thriving bagging industry can be developed from the "plastic bag" which can be used in agriculture operations.

Conclusion

Current government practices as well as the legal obligations created on the investor show some attempt to forge inter-sectoral relationships with the petroleum sector. However, better legal mechanisms can be designed to serve this purpose. The emphasis seems to have been on

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46. At least one company, Trinidad-Tesoro has made use of this tax break by maintaining the Trinidad-Tesoro Agriculture Company Ltd. This company is involved in mixed farming. See Trinidad-Tesoro Petroleum Co. Ltd. Annual Report, 1980, pp. 14-15.

47. Budget Speech, 1978, p. 8.

a "fiscal linkage" rather than a "technology linkage". Inter-sectoral public spending has increased but it is questionable whether attempts have been made to create local capabilities for benefiting from increased feedstock and low cost energy.

(c) Suggestions for Reform

(i) Legal Mechanisms to Implement Linkage

The companies operating in the petroleum sector should be made to see their role in terms of the country as a whole and not only as an "enclave" industry. For this purpose, it is submitted that laws should be designed to integrate the petroleum company into the mainstream of national development.

In order to implement this objective the local authority should legislate a requirement that a certain percentage of after-tax profit be reinvested in local ventures. This would apply to countries operating under petroleum development contracts as well as joint ventures. While the state includes such an approach as part of its energy policy,[48] there has been no implementation in the

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48. See Announced Energy Policy of Trinidad and Tobago, 1979, p. 3 where it states:
"Branches and subsidiaries of foreign companies will be encouraged to reinvest locally a minimum of a certain percentage of their after-tax profits. Where they do not wish to reinvest in their own line of business, they will be encouraged to invest their funds in locally controlled public companies ...".

form of a law. This capital, instead of being repatriated, could be channelled into a state owned development finance corporation or into a subsidiary company of the investor which would develop a certain defined sector of the economy. If the first option is used, it would alow a recirculation of finance into development projects while the second option offers both finance and the technology and managerial skills of the investor. The obligation to reinvest is not a new approach in the petroleum sector. Angola has used it by tieing reinvestment finance to the amount of oil extracted locally.[49]

In Guatemala, it took the form of an obligation to invest a certain amount, escalating annually, on infrastructure development such as roads, schools and hospitals.[50] The real benefit to be derived from a reinvestment

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49. See Angola - Sun Oil Concessions Contract, 21 March 1973, Petrol. Concessions Handbook, Supp. 25, p. 5, where an "obligation to invest outside oil" is created. It states:
"In order to further economic development of province, companies agree to invest, independenlty of the obligations, as follows:
Up to production of 25,000 barrels per day ÷ 0.25 of price per barrel.
Up to production of 37,500 barrels per day ÷ 0.33 of price per barrel.
Beyond a production of 37,500 barrels of oil per day ÷ 0.50 of price per barrel.

50. See Contract for Exploration and Exploitation of Petroleum No. 4-78, 13 Oct., 1978 between the Govt. of Guatemala, Texaco Exploration Guatemala Inc. and Amoco Guatemala Petroleum Company, Petrol. Concessions Handbook, Supp. 44, p. 68. It states:,

(contd.)

obligation, is its incentive to develop a local capital goods sector and inter-sectoral development.

Combined with the policy of reinvestment should be one of tax concessions. Reinvested profits should be compensated with enhanced repatriation of profits resulting from undertaken ventures. A petroleum company is interested in profit and its extra developmental expenditures should be cancelled out with concessions given at a later date.

An important element in linking sectors of the economy in order to promote more local content and value added, is to have national ownership of the facilities. A disinvestment or "fade out" schedule should be prescribed by law so as to allow investor to have a perpetual lien on the productivity, ownership rights and foreign exchange. Disinvestment would allow a dilution or surrender of a share of this equity ownership. For example, in India, it is stated in the exploration and production contract that

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"Contractor to build highways or to improve the existing ones during the exploration stage, ... at a cost to be determined according to the following scale:

First year:	zero (0)	quetzales	per	hectare
Second year:	one (1)	"	"	"
Third year:	three (3)	"	"	"
Fourth year:	six (6)	"	"	"
Fifth year:	ten (10)	"	"	"
Sixth year:	twenty (20)	"	"	"

Contractor to build within the first three years of exploitation at a cost of at least 300,000, a school and a hospital, as well as to pay for the educational staff services for those of at least one permanent doctor and for those of the required paramedical personnel."

the state take over the venture after eleven years or as "otherwise mutually agreed".[51] Alternatively, local ownership could be linked to pay out periods returned to the investor. Combined with local ownership there should be local training and investors should be made to undertake a serious training programme in order to equip locals for the duties of ownership. A joint venture should be seen as a temporary measure, initially as partners and later with state control. Their role should be to provide "loan capital" and not "equity capital". It is only when the state assumes control of the means of production, that local value added would operate to its benefit.

Alternative contractual arrangements can also be employed in place of the equity joint venture so as to give the state more initial control while allowing the inflow of technology. A "technology supply" contract, management contracts and government to government joint ventures can all be used. These can be used where there is no problem with the funding of the venture, the technology in question can be easily absorbed and there are available domestic or regional markets for the products. The "technology supply" contract as used in Venezuela and Algeria, call for a lump sum payment and/or a fixed royalty charge. The state must have properly identified the area and type of technology which it requires and the duration of the contract should

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51. See Reading Bates Group Offshore Contract, Petrol. Concessions Handbook, Supp. 33, p. 37.

be such as to allow the absortion of technical know how. Government to government joint ventures operate on the basis of a division of labour. Trinidad's raw materials could be refined in association with a country which possesses a relevant technology. Low cost feedstocks from Trinidad could be developed by a country which possesses both gas and markets, so for example ammonia, naphta and urea could be all further refined. These can also provide long term contracts which would take care of marketing.[52] A country which is particularly interested in petrochemical development is Japan, which possesses a highly developed technology in ths area.[53] Within the regional setting, Mexican expertise could be employed in association with Venezuelan market potential in the development of Trinidad's natural gas, "olefin" and "aromatics" feedstocks.

In seeking to develop more local procurement of goods and services, the legal mechanisms which deal with such matters could be improved. A fair opportunity should

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52. See "Co-operation in the development of petrochemicals in the developing countries" in Petroleum Co-operation among Developing Countries, U.N. Doc. ST/ESA/57, pp. 80-84.

53. The Japanese have been very active in the Middle East petrochemical industry, using a technology developed only after World War II and actively exported through the dynamic Ministry of Trade and Industry. See for more details, L. Turner, Middle East Industrialisation, A Study of Saudi and Iranian Downstream Investments, op. cit., supra note 31. Japanese private enterprise such as the Mitsubishi Chemicals Corp. and Sumitomo Chemicals Corp. also seek direct foreign investment opportunities. They are much smaller than established companies as Dow and I.C.I.

be given to make use of locally manufactured goods and contracting services. It is not felt that these would be developed by simply restricting imports. Local facilities and expertise are at a basic to intermediate stage and heavy reliance is still placed on the importation of scientific support and equipment supply services. However, local resources of a competitive price, quality and performance should be utilised, they shouldn't remain unused because the established business patterns of the investor dictate that they be obtained elsewhere. The present requirement to only give "preference" to local goods and services is not enough. A requirement should be established in law, that local goods and services would be used if available at comparable quality, price and performance and even if 10%-15% above the normal price of such services or the c.i.f. price of goods.[54] Further, the grant of duty free concessions presently offered to goods, materials and equipment should only be granted if this condition is satisfied and the company provides a statement of the criteria used in not selecting local goods and services. An obligation of

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54. See for example, Summary of Typical Production Sharing Agreement Between anInternational Company and EGPC/ Government, PL/BOL/CC/Mid. East/Supp. 36, p. 26, at pp. 31-33 where it is stated:
"Operator and its contractors shall give priority to local contractors as long as their prices and performance are comparable. Shall give preference to locally manufactured materials, equipment, machinery and consumables, however such material may be imported if price of locally manufactured material is more than ten (10%) percent higher."

this kind may encourage local industry, reduce the labour intensive nature of the industry and save foreign exchange outflow. In addition, since foreign investors assess all obligations in terms of their economic viability, accelerated depreciation tax deductions could be offered for both tangible and intangible local services which are employed by the investor.

Local processing should be actively promoted both in law and in the contract so as to create obligations on the investor to have more local value added. Present obligations on the petroleum company involved in exploration and development are minimal and restricted to refining facilities being built and local crude being refined locally. Joint ventures in the gas related industries show no signs of the foreign investor being asked to play a role in downstream diversification thereby augmenting the profit outflow from the country. As indicated earlier, clear potential exists for further processing in both the oil and gas based feedstocks.

Local processing should be made a definite obligation at a certain point and not a mere future intention to negotiate or consider.[55] The law should create the

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55. See for example, Production Sharing Contract Between Pertimina (Indonesia) and Indonesia Offshore Operations Inc. (1972), s. 14-10 where it is stated:
"Contractor shall be willing to consider to come to another contract or loan agreement for the local processing of any product derived from the petroleum operations hereunder, or mutually agreeable terms."

obligation and an interim processing agreement could be signed at the start of the main contract subject to certain conditions such as a feasibility study. The obligation can be related to the net cash returns to the company as quantified in payout periods. An obligation to set up local processing facilities should also be made conditional on the economic feasibility of the project. As a tax measure to create incentive, profits accruing from processing facilities could be afforded a "tax holiday" in the initial years of its operations. In using this approach, it is necessary for the state to have a properly defined policy on downstream processing so that there is an identification of potential and prospects of processing facilities. Unprocessed exports such as crude oil, should be subject to export quota restriction and a requirement that locally available processing facilities should have a right to "first refusal" before the granting of export permission.[56]

Marketing and shipping could be regulated with a view to allowing more state participation and control. This would allow the state an opportunity to enter the world markets and to develop an expertise for trading and

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56. See for example, the Indonesian P.S.C. ibid., where the contractor is asked "to have refined in Indonesia ten percent (10%) of the share of crude oil to which it is entitled ... and should no refining capacity to be available therefore to set up a corresponding refining capacity for that purpose ... in lieu of setting up such refining capacity ... make an equivalent investment in another project related to petroleum or petrochemical industries."

influencing the conditions therein.

The first step towards creating a shipping facility for transportation, would be to enter into a joint venture agreement with a foreign shipping interest or a government. A shipping line is usually beyond the financial capability of small countries who are not able to generate economies of scale. The forging of links with the Brazilian national shipping company, Docenave and the L.N.G. tanker joint venture, are steps in the right direction. As a second step, a clause should be included in contract which requires these ships to be used or ships which are registered under the national flag.[57] A provision for their use should be conditional on tariffs being non-discriminatory.[58] The use of local transport facilities may be particularly important in the transportation of petrochemical and L.N.G., where such cost could determine the

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57. See for example, Art. 23(2) SONATRACH (Algeria)/EL PASO Liquified Natural Gas Agreement, 1975, where it states:
"Purchaser's and Seller's obligations under this Agreement are subject to the execution of the agreement necessary for the furnishing of the L.N.G. tankers required to transport the L.N.G. covered by this Agreement."

58. See for example, Guatemalan Contract for Exploration and Exploitation of Petroleum, No. 4-78, 13 Oct., 1978 between Gov't of Guatemala, Texaco Exploration Guatemala, Inc. and Amoco Guatemala Petrol. Co., Petrol. Concessions Handbook, Vol. 41, p. 68, where it states:
"The state reserves construction and operation of refineries, pipelines, and transportation of hydrocarbons discovered. Contractors to utilise on the basis of non-discriminatory tariffs, any transportation facilities built.

profitability or unprofitability of a project. Any joint venture entered into should be premised on the assumption that locals would be trained to assume control over a period of time.

Joint marketing structures with the foreign investor could also be implemented. This could replace the present system of only treating the investor as a sale's agent. It is necessary for locals to learn the skills and enter the market through established outlets. Since the industry is dominated by vertically integrated networks of sales, it would be difficult to compete on the open market. Long term supply contracts with countries in need of energy sources may work well as a marketing technique. Also, shorter contracts, payment in kind and the right of local marketing outlets to buy local petroleum and products at market price may all generate supplies for the national oil company's, TRINTOC, marketing outlets. This is necessary since it is fundamental in any marketing operation that the seller show that supplies are both reliable and adequate.

(ii) Institutional Arrangement for Implementing Integration

It is proposed that certain changes be made to the existing institutional arrangement which directs energy sector development.

Presently, the National Energy Corporation functions as a co-ordinating and supervisory body over

state enterprises operating in the oil and gas sector. The Corporation reports to the Minister. All companies are under its aegis including the national oil company, national gas company and gas related joint ventures. In keeping with earlier recommendations for disbanding the N.E.C. and creating a more vibrant and independent national oil company together with a national petroleum advisory body, it is recommended that two new companies be established. A National Petrochemicals Company and a Petroleum Development Company.

The National Petrochemical Company would be a subsidiary of the National Petroleum Company. It would have its own board of directors, capital, borrowing powers and would be registered under the Company Law. Its Chairman would sit on the board of the National Petroleum Company. The new company would be an instrument of state policy in the development of a petrochemicals industry and would implement a national downstream development plan in that sector. It would enter into joint ventures on behalf of the state and its purpose would be to make profit. In everyday dealings, its purpose would include feasibility studies and project evaluations in terms of the national plan. At all times, the guidelines established by the proposed National Petroleum Advisory and Planning Board would serve as the basic tenents of policy.

The main reason for suggesting this approach is to place the petrochemicals sector under an integrated

national oil company involved in all phases of the industry. This allows for more co-ordinated planning and creates a unity of purpose. Also, ultimate accountability would rest with the Parliament rather than with a Ministry. This would promotes enterprise and flexibility and an efficient decision-making process.[59] This approach is also more likely to integrate the operations in the petrochemicals sector into the national economic development plans.

The second company which should be established is a Petroleum Development Corporation. This company would seek to promote certain specified economic ventures so as to provide speedy sectoral growth. Capital for this company should come from the existing Petroleum Development Fund, Infrastructure Development Fund, Fisheries Fund and Food and Agriculture Fund. The vesting of the "special funds" into a commercial development corporation would divert surplus capital away from an overburdened administrative structure.

The Board of this company should be a mixture of the business sector, foreign investor interest and government officials. While safeguarding against political decision-making, it combines private and public commercial

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59. A similar approach was used in Iran where the National Petrochemicals Company (N.P.C.) established in 1965 was created as an autonomous subsidiary of the National Iranian Oil Company. It was given responsibility for developing the industry and joint venture interests.

interest and foreign investor advice. A major part of its undertaking would be inter-sectoral integration and the development of a capital goods sector to service the oil and gas demands. It would also provide financial assistance in realising the projects and development in question. For this reason, it should work in conjunction with the Ministry of Industry and Commerce but be incorporated separately.

A Petroleum Development Corporation would also serve as a useful technique for efficient financial management and budgeting. More importantly, it would add business acumen to inter-sectoral growth and development.

B. THE TRANSFER OF TECHNOLOGY AND PETROLEUM DEVELOPMENT, THE NEED FOR A NATIONAL TECHNOLOGICAL CAPABILITY

Introduction

The ultimate objective of any petroleum developing country is to control and operate all phases of its industry's operation. It is now proposed to look at the technology requirements of the petroleum sector and to seek to propose devices for its effective transfer and absorbtion into the local industry. Local control is dependent on such a transfer.

It is fundamental to the understanding of the transfer of technology to appreciate that the development of a local technological capacity is not in the interest of the multinational corporation. A transfer of this nature

is not profitable to the investor and as such, one cannot be optimistic for change and growth if such is left to purely market forces. Indeed, the non-development of a local technological base on its own or through the state oil company, is to the beenfit of the investor for there would be no competition to its status and its role as a technology supplier. Usually therefore, technology is conveyed in a skewed and asymetrical manner which perpetuates dependency and limits the absorbtive capacity of the state. Local development is only promoted in those activities which are attendant and subsidiary.

Nevertheless, the need exists for an effective and meaningful transfer of technology[60] if real development is to take place. In the absence of such, the acquisition of technology would always remain subject to the termination of the contract of acquisition. It would mean that technology acquisition would remain an investment decision.

In speaking of a transfer of technology there is a certain amount of vagueness. A transfer as such does not take place. It would be more accurate to refer to the development of a local capacity to absorb ideas, skills

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60. "Transfer of technology" is defined as the "transfer" of systematic knowledge for the manufacture of a product, for the application of a process or for the rendering of a service. Transactions involving the mere sale or mere lease of goods are specifically excluded". See Negotiation of an International Code of Conduct on the Transfer of Technology, U.N. Doc. TD/Code TOT/17, 3 Mar. 1981, p. 3.

and processes which are imported and to adapt them to local use. This then, is an investment in human development. Involved in the process is the training of manpower, research and development plus the use and adaptation of imported technologies to local conditions. One definition provided for the transfer as it applied to petroleum matters was,[61]

> "... transfer of petroleum technology should mean the ability of the developing country concerned to purchase or hire, in the international market, the most advanced equipment for exploration and development at a fair and reasonable cost. Above all, it should also mean developing its human resources by enabling its citizens to acquire the mental capability and practical experience needed to comprehend the mysteries of modern technology and to manipulate the sophisticated tools ...".

1. Petroleum Technology: Form and Ownership

Technology can be defined as knowledge, skills and processes which are employed in developing and producing goods, materials and services. There are two aspects of technology, the tangible and the intangible. The intangible relates more to knowledge and skills and involves the ability to repair, maintain, create modifications and

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61. H.S. ZAKARIYA, "Transfer of Technology Under Petroleum Development Contracts", (1982) Journal of World Trade Law 207, p. 221.

innovations of the physical assets which are imported. As such it revolves around a technological capability. The other aspect is the tangible, which is the physical embodiment of the technology acquired and is represented, inter alia, in equipment, tools, machinery and plant. A true and effective transfer involves both aspects because a conveyance of only the physical aspect is to foster the technological dependence of the state.

The technology involved in petroleum operations is one rooted in the science and engineering disciplines. It requires, among others, geological, geophysical, seismic, drilling, reservoir enginering and computer software services. Alongside these services, a technology and know how must exist to use specially designed equipment and to analyse its results. For this purpose, skilled personnel and manpower are required to facilitate the operational and management aspect of the industry.

Previously, the transnational oil companies possessed all the services and technology required for petroleum development and this allowed them a powerful bargaining weapon. However, with increasing specialisation of oil and gas technology, the skills came to be monopolised by oil contractors, oil equipment manufacturing firms, consultancy firms and integrated engineering firms.[62] The oil

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62. See Energy Supplies for Developing Countries, 1980, U.N. Doc. TD/B/C.6/31/Rev. 1, pp. 17-21, hereinafter referred to as U.N. Doc. TD/B/c.6/31/Rev. 1.

contractors undertake specific tasks involving such things as seismic studies, geological, geophysical, logging and drilling on a task basis. A good example would be the Reading, Bates Co. which is a specialist drilling contractor presently operating in India. Oil equipment manufacturing companies, which are mainly American based, provide associated equipment such as offshore platforms, drilling and well equipment and installations used in refineries, petrochemical plants and such things as service stations.[63]

Engineering companies are usually concerned with the installations and the building of plants, refineries and petrochemical processing facilities. Integrated engineering companies are well used in the industry, for unlike pure engineering companies, they are affiliated with equipment companies and so provide equipment, project management, training and "turn key" projects.[64] Finally, there are the autonomous consulting firms which do feasibility studies, select technology, equipment and plant and direct budget operations. One can say that, the related petroleum technology is now controlled by a series of specialist "jobbing gangs" who contract out their services as

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63. The large companies in this area include Baker International, Dresser Industries, Halliburton, Hughes Tools, Schlumberger and Smith International. Id., Table 10, p. 20.

64. The major companies in this field are Kellog, Lummus, Stone and Webster, Lurgi, Fluor, Forster Wheeler, Creusot Loire, Badger, Snam Progetti and Technip. Id., Table 11, p. 21.

required.

While major oil companies are still involved in research and development work, they are now more dependent on these specialist interest groups. The oil companies have retained an importance by assuming the role of financiers in oil operations and so are able to bid and obtain areas to be developed. Since the cost of developing a middle range oilfield can run into the hundreds of million and most developing countries cannot afford a "relevant" budget for such an operation, they turn to the oil companies. They have assumed the role of financial backers because it is the actual investment as opposed to personnel and operating cost, which takes the largest skill of the oil development financing.[65] In addition to their role as

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65. See "The Training of Nationals as Technicians and Workers in the Petroleum Industry of Developing Countries, Including Continuous Training and the Training in the Light of Technological Progress", I.L.O. Petroleum Committee, Ninth Session, Geneva, 1980, p. 39, Table 1, hereinafter referred to as "I.L.O. Petroleum Committee Training Report, 1980."

Approximate Distribution of Costs in Each of the Five Branches of the Petroleum Industry

Branch	Investment	Personnel	Operating	Misc.	Total
1. Exploration	20	70	10	-	100
2. Drilling and Production	77	8	15	-	100
3. Transport	76	7	17	-	100
4. Refining	71	10	17	-	100
5. Distribution	60	20	20	-	100

It should be noted that Nos. 2-5 make up approximately 85% of the total petroleum project cost.

underwriters of the financial risk associated with petroleum development, the transnational investor also acts in the capacity of an intermediary between private contractors, engineering equipment suppliers and manufacturers and consultancy interest and the developing country. As one United Nations study noted:[66]

> "The oil companies control the know how for the operations (geophysics, drilling, production methods of field, etc.) but often do not hold all the relevant technology. In this way they have secured the role of "co-ordinators" of operations and intermediaries between the service companies and the oil producing countries."

One finds then that a combination of private specialist interest and oil companies, now own the technology required for petroleum development. The transfer, however, is effected through the oil companies which are able to secure development rights by virtue of their financial liquidity.

In looking at the form and ownership of petroleum technology, one has also to look at the technology possessed by the country and its capacity to absorb the imported know how. The extent to which imported technology is required is dependent on the technological capacity and base of the technology importing country. Most developing countries do not possess an indigenous technology. Additionally, countries without an adequate base in engineering,

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66. U.N. Doc. TD/B/C.6/31/Rev. 1, op. cit., supra, note , p. 19.

management, natural sciences, research and development and an available service and capital goods industry, may find themselves unable to benefit from imported technology. An inadequate educational basis may place constraints on a country by rendering it ill-prepared to absorb, adapt and complement technology to local conditions. Thus the prospects for actual ownership would appear limited.

In assessing the technology possessed and the technological capacity of a country one can look to its existing service industries. In most cases this is basic to intermediate and usually does not exceed the logistics support services stage which relates to exploration activity. The amount of local value added by industry is usually indicative of the status of its know how and technology availability. One can classify the services sector into six different categories in order to establish a format for guaging the technology possessed locally by states. In the form of a chart it would be represented as follows:[67]

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67. The information used in this chart was obtained from, A.P.H. VAN MEURS, Modern Petroleum Economics, op. cit., supra, note 33, p. 417.

TABLE XVI: Classification of Services Industries in Petroleum Development

Service	Type of activity and phase of development	Value added by Activity
1. Preliminary	Not directly related to petroleum activities. Includes infrastructural facilities - transport, fuel, administrative skills.	3%-10% of exploration cost.
2. Logistical Support Services	Exploration Phase. Includes equipment related to delivery services, e.g. helicopter transport. Also, cementing and logging with local and foreign personnel.	8%-15% of exploration cost.
3. Material Supply Service	Exploration - Discovery Phase, includes well logging services, boats, speciality cement for wells.	15% -45% of Exploration and Development Expenditure.
4. Equipment Supply Service	Development - Production Phase. Includes local drilling rig company, equipment supplies for oilfield, e.g. tanks, pipes, platforms of concrete and steel.	30%-85% of total petroleum sector expenditure.
5. Scientific Support Service	Design, manufacture and supply of equipment. Scientific services, e.g. engineering, seismic, computer, sophisticated equipment, e.g. high quality large diameter pipes.	90% of total expenditure.
6. Export Services	When local petroleum supply industry is able to compete internationally or have an export service industry.	

Countries such as India, Mexico and Algeria are some of the few developing countries which can boast an ability in equipment supply and scientific support services. Here there is a genuine creation of local technology. Most developing countries are only at logistics support services or material supply services stage which are more peripheral services designed to receive imported technology. One can say then, that developing countries are only minimally able to add value locally for their capital goods and services supply technology restricts such addition.

Petroleum technology is still an imported commodity. The presence of specialist firms with a full technological capacity and large oil companies with the financial and management muscle to utilize such know how combine to create an integrated service. However, the creation of a local capability through its national oil company, as in Algeria; by local training, as in Mexico or using research and development, as in India; attest to the fact that the commitment to an approach slowly yields results.

2. Technology Policy and Capability: Case of Trinidad

No clear policy has been articulated which seeks to formulate an approach for the development of a technological capacity. Efforts, therefore, have been piecemeal and dispersed with no consolidated plan of action. The

needs of the local industry in terms of its manpower requirements, research, training and retraining and its linkage to the industry as a whole, have not been the subject of any proper study. There is, however, evidence of a reliance being placed on investor companies to transfer the "tricks of the trade". A government policy paper declared:[68]

> "All firms, whatever the structure of their ownership must in their operations give ample, opportunity to transfer to nationals the skills, knowledge and expertise required to run the business."

In the absence of a statement as to the system in use one can venture to suggest the approach adopted. It would seem that a heavy reliance is placed on the foreign companies to develop local abilities and teach the "tricks of the trade". State efforts, however, have been piecemeal and minimal. In relying on the foreign companies it should be appreciated that while it is not in their interest to effect a transfer of skills, the comparatively small size of their operation may render their efforts but a "drop in the bucket".

In evaluating the technological capability of the country, three main areas may be examined. These are:

(1) Training of nationals

(2) Research and Development

(3) Development of the services and capital goods sector

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68. See Announced Energy Policy, Govt. of Trinidad and Tobago, 1979, p. 4.

The foreign oil companies operating locally have made some effort towards providing training in the form of "on the job" training, scholarships, in-house seminars and professional and managerial training abroad. However, foreigners still hold top management positions although all skilled and unskilled labour is local and the percentage of locals to foreigners is very high. The university has been training engineers but the facilities for petroleum engineering are only now being established. Chemical engineering, an important discipline for the petroleum industry, has been the least subscribed to.[69] Aside from the university, it would appear that a national training institute is required. There has been talk of a Petroleum Institute which would be involved in the development of improved techniques as they relate to the oil exploration[70] but nothing has been done to realise this body.

All information becomes obsolete without research and this is especially so in the petroleum sector. Present

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69. Breakdown of Engineering Graduates, University of the West Indies 1975-78

Year	Mechanical	Electrical	Civil	Chemical	Petrol.	Total
1975	8	6	7	5	-	26
1976	12	11	9	3	-	35
1977	16	11	12	6	9	54
1978	14	10	22	8	5	59
Total						174

70. See Best Uses of Our Petroleum Resources, op. cit., supra, Note 47, Ch. 1, p. 10.

efforts and capability is very poor. The Department of Chemical Engineering at the University is more oriented towards teaching than research.[71] A Petroleum Testing Laboratory exists but this is small and by no means a national research facility.[72] No serious funding of research has taken place and the facilities are very poor. In addition, no oil company operating locally conducts any research of size.[73]

In the capital goods and services sector one also finds the local ability to be in its primary stage. Using the six fold classification used earlier to categorise the various petroleum services and their value added, one can say that local capability stands at the logistical support

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71. There are two Professors, one Senior Lecturer and three Lecturers.

72. There is planned a National Institute of Higher Education, Research, Science and Technology, NIHERST, which would contain a Centre for Energy Studies, see Budget Speech, Govt. of Trinidad & Tobago, (1982), p. 35.

73. One writer has estimated that a budget of "5 percent of the total sales of the petroleum sector in Trinidad as a benchmark figure for a possible total R + D budget, it is possible to envisage this total sum as having the potential to finance at least one major R + D project". See S. DE CASTRO, "A Technological Policy for Petrochemicals in CARICOM", (1979) 28 Soc. & Econ. Studies 282, p. 324. In the same journal another writer, after a comprehensive study, pointed out that with respect to R + D that "overall, national capability virtually non-existent at the present point in time." See T.M.A. FARREL, "A Tale of Two Issues: Nationalism, The Transfer of Technology and the Petroleum Multinationals in Trinidad-Tobago", (1979) 28 Soc. & Econ. Studies 235, p. 268.

services with some small spill-over to the material supply services stage. This means that most capital goods and related services are imported or provided by foreign firms and their personnel.[74] This indicates that the

74. TABLE XVII: Classification of Locally Available Services Based on Service, Stage and Origin; Major Existing Companies

Company Name	Service/Stage	Foreign/Local
1. BAROID T'DAD Services Ltd.	Logistical Support (retailing oilfield equipment)	F
2. BRISCO Sales Ltd.	Logistical Support (retailing oilfield equipment	F
3. Caribbean Offshore Supply	Logistical Support (Boat and Vessel rental)	L
4. Eastern Coastal Services Ltd.	Logistical support (machine shop)	L
5. Gaftney, Cline & Assoc. (T'DAD) Ltd.	Scientific Support Services (engineering, geological consultants)	F
6. GRANSAUL H.J. & Co. Ltd.	Logistical Support (oilfield supplies & equipment)	L
7. Halliburton T'DAD Ltd.	Equipment Supply (contractors, oil equipment suppliers)	F
8. HYDROCARB T'DAD Ltd.	Equipment supply, oil-well drilling, gravel packing	F
9. ERIC Miller & Co. Ltd.	Logistical Supply (Supply Vessel)	L
10. Kellog Co. Ltd.	Scientific Support Services (Plant design, engineering)	F

(contd.)

non-servicing of the industry from local skills and services may result in a drain on the foreign exchange and the capability to run the industry may still rest outside the country.

The technological capability of Trinidad is still in its conceptual and embryonic stage with no real facilities existing for local consultancy and advisory services. Proper national facilities for training and research are not available. This means that the state still relies heavily on the company to train locals to run the industry rather than relying on its own efforts. The petroleum services sector also has to rely on foreign interest and so one sees a proliferation of foreign interest and such

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11.	Petroleum Offshore Services Ltd.	Material Supply	L
12.	Santa Fe Drilling Co.	Equipment Supply (drilling)	F
13.	Schlumberger	Material Supply (well logging)	F
14.	Skinner Drilling Co. Ltd.	Equipment Supply (drilling & marine operators)	L
15.	Tidewater Marine W.I. Ltd.	Logistical Supply (boats)	F
16.	Trinidad Oilwell Services	Logistical Supply (Cementing)	L

F = Foreign L = Local
Compiled by Author
Source of Material: Partly from, Petroleum Directory 1980, Latin America Section, pp. 139-143. Published by Oil and Gas Journal, OKLA., U.S.A.

integrated engineering companies as Kellog, Schlumberger, Gummus and Halliburton. From this, one can conclude that, under the present policy, one cannot be optimistic for a change in the dependency status of the state.

3. Present Local Provisions for Transfer of Technology: Contractual and Statutory

One is able to indentify certain statutory and contractual obligations which make provision for the transfer of technology to the local state. The main emphasis seems to be on manpower and training. Provisions are also made for the exchanging of information; a reversion of equipment on termination of the contract, building refinery facilities and use of local goods and services all of which can be said to effect a transfer of technology from the investor.

(a) Manpower and Training Provisions

Most oil contracts, basic petroleum laws or statutes of oil companies provide for a programme of local training. All phases of petroleum operations require skilled manpower. The more the human resources development is the greater the opportunity the state has for assuming the responsibility of running its own industry.

First, one can look at the obligations placed on the investor oil companies. The requirements established

by law, for employment and training, are two fold: first, an obligation exists for the company to hire available and qualified locals and secondly, a responsibility exists for training local manpower.

The investor is asked to "minimise" the use of foreign personnel by employing locals who may be suitably qualified. Jobs are to be advertised locally and salaries must be non-discriminatory. The law states that the contractor is to[76]

> "minimise the employment of foreign personnel, ensure that such employees are engaged only in positions for which the operator cannot after reasonable advertisement in at least one daily newspaper circulating in Trinidad and Tobago, find available nationals of Trinidad and Tobago having the necessary qualifications and experience; determine the rules of employment including salary scales in such manner as to ensure that all employees in the same category enjoy equal conditions irrespective of nationality."

This provision only applies to existing and available manpower. It is equivalent to a requirement that the company employ locals to the "maximum extent possible", a directive often used in petroleum agreements.

While this provision is well directed, its limitation is that no sanction exists in the event of non-compliance. Also, all decisions as to actual employment are left to the contractor. The only way the state can prevent this is by refusing to authorise a work permit[77]

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76. Petrol. Reg., 1970, s. 42(f).

77. In 1975, 456 work permits were applied for and 455 were granted.

and this, per se, does not mean a local would get the position. It may also cause disagreement. A way of strengthening the state's position would be for it to provide to the investor an inventory of local personnel who are suitably qualified. In addition, it should retain a veto over appointments providing it can show reasonable grounds for hiring personnel locally available. The inflow of foreign personnel should not, however, be halted prematurely for this allows an instream of technical knowledge.

The second requirement is one of training. A contractor is obliged to enter into an industrial and technical educational training programme with a view to the eventual replacement of foreigners. It is stated that the contractor is to[78]

> "prepare, in consultation with the Minister programmes for industrial and technical education and training, including the grant of scholarships, and carry such programmes out diligently with a view to training nationals of Trinidad and Tobago to replace foreign personnel as soon as reasonably practicable and to affording nationals of Trinidad and Tobago every possible opportunity for occupying senior positions in the operations of the licence."

This has been further defined in the contract to request that the contractor provide fifty thousand dollars (50,000 U.S.) per year in the pre-discovery period and two hundred and fifty thousand (250,000 U.S.) per year in the post

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78. Petrol. Reg., 1970, s. 42(g).

discovery time.'[79] It is the intention of the training scheme to "replace foreign personnel as soon as possible" and the cost of such efforts to be underwritten by the contractor.

This provision could be made more meaningful if certain improvements are made to the obligation created. First, a time schedule can be established for the training of locals to take over the operations. It is not sufficient merely to express an intention that replacement should take place but rather an organised time framework for such should direct the efforts. This would involve precise job classifications and descriptions so as to safeguard against a rearrangement of duties or qualifications to give the semblance of local control. In the schedule itself, there should be an escalating participation by locals in all phases of operation as the contract matures.[80]

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79. See Mobil Explorations Trinidad Ltd., Petroleum Sharing Contract. 1 July 1980, Petrol. Concessions Handbook, Supp. 52, p. 75 at p. 80. The contractor is to

> "provide U.S.$50,000 per year during exploration period for scholarships and training until there is a commercial discovery at which time shall provide $250,000 per year for ten years from commencement of commercial production to employ citizen of Trinidad and Tobago to the maximum extent possible."

80. Note for example the case of Nigeria where a schedule used appear as follows

Skill Category	By 3rd year	By 5th year	By 10 year
Unskilled	100	100	100
Skilled	50	75	100
Clerical & Supervisory	50	75	90

(contd.)

It is also necessary for a time limit to be stated for the preparation of the training programme so that time is not lost in starting the training period.

Under the present legal structure, some companies operating locally do offer training at the basic level, scholarships for university courses and some overseas professional and managerial training.[81] However, in the totally foreign controlled companies such as Amoco T'DAD Oil Co. Ltd. and Texaco Trinidad Inc., which are the main oil producing and main refining companies respectively, the key positions and top management are controlled by foreigners. One study has revealed that Texaco is totally

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Technical	50	75	85
Management	50	75	85

See D.N. SMITH and L.T. WELLS, Negotiating Third World Mineral Agreements, Mass., Ballinger Pub. Co., 1975, p. 105. See also Pakistan, Summary of Model. P.S.C., 1 Dec. 1980, PL/A/BOL/CC, Supp. 39, p. 19 at p. 24, where it is stated that holders of oil mining leases must employ Pakistani nationals as follows: 1/8 of total employees during first five years, ¼ during next five years and at least ½ thereafter.

81. See Trinidad-Tesoro Petrol. Co. Ltd., Annual Report, 1980, pp. 10-11 where it is stated that the company offered training for:
    (1) 120 people in the company's Craft and Student Apprentice's Programme.
    (2) 250 people in in-house technical and supervisory training centres conducted by the company.
    (3) 72 people in company's community development training.
    (4) 28 scholarships for university study in petroleum related areas.
    (5) Endowment to professional chair at university of the West Indies.

controlled from New York up to "the payment of any salary in Trinidad over 1000 T.T. (500 U.S.) a month" while Amoco is controlled from Chicago "even decisons on the awarding of scholarships locally."[82] It is questionable then, the extent to which locals are being trained to "replace foreign personnel" and for "occupying senior positions in the operations." There is evidence, nevertheless, that some form of training is taking place.

The other body required by law to assume the position of a training body is the statutorily created National Petroleum Company. It has been given power to undertake training programmes so as to allow locals a chance to obtain training "to equip them for attaining the highest positions in the petroleum or petrochemical industries" by obtaining training, qualifications and experience.[83] The Company then, is seen as shouldering part of the national effort into the training of local personnel. However, in this role the Company is asked to train through "training programmes" and not to establish training centers, educational and technical institutes and laboratories and

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82. See T.M.A. FARREL, The Multinational Corporations, The Petroleum Industry and Economic Underdevelopment in Trinidad and Tobago, unpub. Ph.d. Thesis, Cornell University, New York, 1974, pp. 153-162.

83. See Act 33 1969, National Petroleum Company Act, 1969, s. 6(e).

research centers.[84] TRINTOC, the company which presently operates as a de facto national oil company has not been expressly authorised to undertake traiing or research by its constituent instrument. It has however, undertaken some minimal training efforts.[85] Presently, the role of this company is not sufficiently expansive as a totally integrated and monopoly interest. For example, it is not a partner in petrochemical joint-ventures, and there is no policy for it to assume a "carried interest" participation on behalf of the state. As a result, it is not properly poised to benefit by learning from imported technology and does not have facilities of its own to be independent. Its overall capacity remains weak in ajor phases of operations.[86] One finds, that the use of a national oil company as a vehicle for mobilising local training and manpower has seen a skewed development while its full potential has remained largely unused.

(b) Information

A very important form of the transfer of technology

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84. See for example, the IRAQ National Oil Company Statute, which contemplates all these functions for the Company. See Law No. 123, 4 Sept., 1967 Establishing Iraq National Oil Company, Art. 19(1)-(9) in National Oil Company Statutes, Vol. 20, Barrows Pub. Co., hereinafter cited as PL/Nat. Oil Co. Statutes.

85. See TRINTOC Annual Report, 1977, pp. 17-18.

86. See T.M.A. FARREL, "A Tale of Two Issues ...", op. cit., supra, note 73, pp. 265-268.

is in the area of information. Information may take many forms such as reports, analyses, maps, field data and records. The value of such knowledge lies in its usefulness in understanding the actual item under study and the approach taken in studying it. In the petroleum area, the large investor oil companies are familiar with operations on a global level and possess large data banks of information and analysis. Therefore, the exchange of information between these companies and a state constitutes a process of attrition whereby the approach, skills and knowledge of the investor may be imparted and facilitated through such information.

The local laws seek to allow an exchange of information in so far as the fields being developed are concerned. While this allows knowledge to be obtained about the field in question, it also provides analysis and an approach which may be instructive for the state.

Also, local representatives of the state are to be allowed acess to the information of the contractor. They are allowed to[87]

> "make abstracts or copies of any records, maps, accounts and other documents which the licensee is required to keep in accordance with the provisions of his license."

This allows the state to obtain information it may need. A requirement also exists for the contractor to furnish and prepare information which is to be forwarded to the

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87. Petrol. Reg., 1970, s. 43(1).

Minister. It is stated that the contractor is to[88]

> "furnish well location, maps, returns and data concerning operations in the contract area in such manner and detail as the Minister may require."

and to,

> "submit to the Minister copies of all such original, geological, geophysical drilling, well, production and other data at it may compile during the term thereof."

Obligations of this nature promote a better overall awareness and understanding of the issues involved.

Information may be expanded to include knowledge obtained by doing, or the know how acquired through the process of attrition. The Minister retains certain residual powers in the production sharing contract to "supervise the operations" and "to observe the contractor's execution". He may also have the contractor "consult and co-operate" with him while undertaking their work.[89] These provisions though not existing in the earlier exploration and production licences, promote a passive education process of learning. Such knowledge would also facilitate some conveyance of technological know how.

The provisions which allow access to and furnishing of data are adequate. However, the mere collection of data is but one part of the learning process. As suggested earlier, the learning by attrition would be better facilitated by joint exploration and supervisory staff. In this

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89. See Model. P.S.C., ss. 2(1), (2), (3).

way, the process would not be passive but active. It would be more in the nature of "on the job" training into the inner working of the operations.

(c) Title to Equipment

In a transfer of technology there is a conveyance of konwledge and skills. There is also a transfer of the physical embodiments of this know how; the tools, equipment and installations. In the petroleum contract, the state has retained a right on termination of the contract, to obtain[90]

> "... free of charge, in good order repair and condition (fair wear and tear excepted) and installations, building, works, pipelines and other articles used in petroleum operations in the contract area together with all casings, engines, tubings and fixtures below surface level."

This allows the state a right to retain the physical assets used in actual operations and an opportunity to outfit itself with facilities for conducting development work. Acquisition of technology by this means allows a localisation of services even after the contract of acquisition has terminated. However, the shortcoming of this type of technology transfer is that the locals may still have to rely on imported skills for repair, maintenance and spare parts.

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90. Model. P.S.C., Cl. XIV.

(d) Use of Local Goods and Services and Processing

The requirement to make the contractor purchase local goods and use local services is also a means of effecting a technology transfer. While offering an incentive for such services to develop locally it promotes a more local industrial base and services sector which creates greater local value added. Another provision which authorises a local technological structure is that which requires local refining and the erection of a refinery.[91] However, the value of these provisions is only available when they have been enforced and some have not been so used.

Conclusion

The present legal mechanisms for transferring technology relies heavily on the investor oil company and its efforts. State efforts into research and development, training and development of a service industry is only at an embryonic stage. Bearing in mind that companies do not find it profitable to effectuate a transfer of technology and also the size of their operations does not allow for a "relevant" budget for technological development, it is not surprising that local capabilities are limited. The state

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91. Petrol. Reg., 1970, s. 51.

oil company, a good vehicle for realising a local know how, has not been used to its full potential. All of these may be related to a fundamental shortcoming, the need for an organised and studied plan of action.

4. Suggestions for Reform

Any reformist suggestion must include at its base a plan. It is fundamental to the present approach in Trinidad that there be formulated a comprehensive national technology plan. This would serve two purposes. First, it would be an inventory of all local manpower, training, research and technology available. Secondly, the needs and prospective requirements would be outlined and an approach suggested for the acquisition of such skills and knowledge. Its basic aim would be to identify ways of strenghtening the local capability and of assuming national control.

In terms of the actual constituents of the plan, there would be a manpower development strategy which lays out a programme for training the requisite personnel needed by the local industry. Some form of body should be institutionalised for assessing on-going manpower needs and planning programmes and projects for such needs. Other constituents of the plan would involve promotion of research and development, identification and creation of facilities for fostering a capital goods and services sector and mechanisms for obtaining a transfer of technology

which is effective and on reasonable terms. It is fundamental to this policy that the state assume a responsibility for its own development rather than rely on the foreign investor.

The second suggestion for reform is that better terms for the acquisition and use of technology should be designed. There should be an "unpackaging" of the present system for technology acquisition to allow for a more meaningful transfer. As outlined earlier, most of the relevant technology is owned by private companies involved in engineering, consultancy, manufacturing and contracting. It would be better to approach these companies directly, in some cases, without the intermediary of the investor oil company, which does not find the transfer of technology a viable economic venture. In cases where a project can be financially underwritten locally, a joint venture contract with strong training programmes for locals, should be entered into. The investor would be made responsible for training in all phases of operation from basic design to operation matters. These "product on line" contracts, as they are called, allow for an on-going transfer of technology through training and joint participation. As a mechanism for technology acquisition, they are more adequate than "turnkey" projects which offer the "product in hand" but not the technology. In those cases where the state is unable to afford the financial underwriting of the project, the investor oil company can continue to assume the

financial risk as used presently.

If this "joint venture-project on line" approach is taken then the state oil company has to assume a paramount role. All joint ventures should see the state oil company as the main state contractor assuming equal importance with the foreign contractor and representing the state's efforts. In this way an active state participation is allowed and the company is given a chance to become an integrated enterprise. Joint efforts would also contribute to the education through an attrition process, a "learning by doing" approach. As a strategy, it facilitates a consolidation of services in one body and gives a monopoly interest, an effective bargaining tool. This suggested approach has worked well in Algeria where the national oil company, SONATRACH, has ventured into joint venture agreements for both "turnkey" and "product on line" investments.[92]

A relaxation in the use of the investor oil company can see more use made of bilateral co-operation and technical assistance agreements with other countries. Some developing countries possess adequate technology in certain

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92. SONATRACH has, to date, entered into nine important joint ventures with foreign firms in drilling, geophysical activities, distribution and sale of drilling muds, diagraphical and electric soundings and well logging, strata test, engineering studies, petrochemical projects, manufacture of spare parts of drilling equipment and distribution network. See U.N. Doc. TD/B/C.6/31/Rev. 1, loc. cit., supra, note 62, p. 44.

energy related fields. India and Mexico have a highly developed petroleum refinery technology, Algeria possesses good training institutes and petrochemical know how, while Brazil has been exporting its drilling, exploration and development skills through Petrobras International. These remain sources for access to better terms for a technology transfer.

Research and development is one area which is in need of development. The petroleum industry is one which is very tied to technical and technological developments. Creation of a local research capability in this area can help reduce the dependence which the country presently has on external sources of technology, create a scientific and engineering base, and establish a local technology for the local industry and for export. Such facilities would allow import substitution and in turn reduce the foreign exchange payout through royalties under the patent system.

If the state is to promote research and relevant facilities, then an adequate budget should be provided which supports a relevant research programme. Investors can be made to provide a certain percentage of after tax profit for this budget, such sums can be an allowable tax deduction. Fiscal incentives can also be given for other local research and expenditure and imported equipment to be so used. Any patents derived from local expenditure or tax deductible contributions should remain the property of the state. The purpose of these efforts should only be to

supplement the existing transfer of technology for it must be borne in mind that, besides being very costly, research is a slow, long-term process. Another important function of the research should be to allow the adaptation of foreign imported technology to local conditions and needs.

A National Petroleum Research Institute should be created in the administrative structure. This can work in conjunction with the engineering department at the university but have a separate budget. It can also work in co-operation with the investor oil company and its parent company in all matters concerning local research and development. This system has been used in Norway with remarkable results.[93] In designing any research and development programme, it should be remembered that the investor oil company has already a finely tuned technology capability

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93. In Norway, it is required that a "company is obliged to arrange at least 50% of the value of R + D in connection therewith will be spent in Norway and in co-operation with Norwegian research institutions and/or industry". A separate contract is intended for technology, research and development co-operation with all holders of offshore production licences. For the purpose of this agreement research and development has been clearly defined to include:

> "Offshore petroleum technological research, in particular research, development studies, development and testing of concepts and technical solutions, product development, feasibility and pre-engineering studies. R + D may be in exploration, drilling, reservoir engineering, or production of hydrocarbons. R + D only includes design engineering of any particular offshore facility which contain substantial elements of development."

See Summary of 1980 Frame Agreement for Offshore Petroleum Technology Research and Development Activities (R + D), Petrol. Concessions Handbook, Supp. 50, pp. 26-44 at 26.

which should be tapped by the local industry.

The most important part of the state effort should be in the area of manpower and training. While the practical industry related training may be shouldered by the investor company, the state should assume more responsibility for creating a local absorptive capacity in the industry. Its objective should be to create a national cadre of qualified personnel who are able to run the entire industry in all phases of operation. Hence training should be both theoretical and practical and be integrated into the general education system.

In assuming a responsibility for local training, the emphasis should be on technical and engineering studies for these most effectively promote the assimilation of foreign know-how. However, in an integrated industry all areas and levels of training are necessary.[94] In undertaking such a programme, it is required that a centralised

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94. The following are areas of training which have been identified as important in petroleum operations: geology, geophysics, geochemistry, computer studies, drilling technology, techniques and engineering, reservoir and production engineering, transportation and marketing of crude oil, refining, plant operation, maintenance, trouble shooting, safety, marketing of products, technical services to consumers, management of men and material, petroleum policy and planning. The levels of training have been identified as scientists, technologists, economists, and administrators, officials for management, marketing personnel, operators with process and operational knowledge and skilled technicians. See V.V. SASTRI, Research and Training in State Petroleum Enterprises in State Petroleum Enterprises in Developing Countries, New York, published by U.N. by Pergamon Press, 1980, p. 135.

training institute, an Institute of Petroleum Studies, be established. It would undertake a programme of action as directed by the national technology plan and manpower strategy established therein. In this way local training for the industry can be undertaken and also be co-ordinated with the efforts taking place in the industry and by the investor oil company. The latter's aim would be to assist these efforts by providing "on the job" training, management experience, joint operating exposure, "in-house" seminars and practical orientations in all fields. Access to parent company training programmes, international sales, marketing affiliates and foreign petroleum institutes should be provided for in the contract of acquisition.

National petroleum institutes have become part of the educational process in those countries with a more advanced petroleum technology. These include, in Algeria, Algerian Petroleum Institute; in Mexico, Institute of Petroleum; in Venezuela, Venezuelan Institute of Petroleum Technology, Intevep.; in India, Institute of Petroleum Exploration at Dehra Dun.[95] Indeed, while being used with a "fade out" schedule of foreign personnel, this approach recognises that it is also the state's responsibility to train its nationals and to have a "cadre in waiting" to

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95. See U.N. Doc. TD/B/C.6/31/Rev. 1, loc. cit., supra, note 62, pp. 44-47.

take over the industry.[96]

In conclusion one can say that, inter-sectoral development, downstream linkage and the transfer of technology cannot be effected through a purely legal approach. Rather, the legal mechanisms existing and the suggested reforms made are intended to establish the economic goals of the state. Also, they present a regulatory framework for organising and managing these goals in order to secure their fulfillment to the benefit of the state.

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96. In the actual setting up of a training programme, the state can use the services of the International Labour Office which provides an Energy Manpower Information Service, E.M.I.S. Its object is to "place relevant and easily retrievable information at the services of users in order to facilitate analysis and decision-making concerning manpower issues in the energy sector ... it could be envisaged to extend the services of E.M.I.S., to supplement the direct transmission of knowledge and skills, for exasmple, through regional workshops. See Report of the Expert Group Meeting on Assessment of Manpower and Training Needs for the Energy Sector, Bangkok, 8 Dec. 1982, I.L.O. Regional Office for Asia and the Pacific, pp. 13-15.

Chapter Seven Conclusion and Overview

The premise upon which this study was undertaken, is that the legal and administrative structure used in running a petroleum industry must be capable of achieving for the state its basic objectives. It is the basic finding of this study that the existing regulation used in Trinidad and Tobago are, to a great extent, unable to achieve these objectives.

The fundamental weakness of the present arrangement is that it does not allow the state an opportunity to reduce its dependence on the multinational corporation. One finds that after some sixty years of petroleum development, Trinidad and Tobago is not capable of assuming control of the local industry. This is mainly because the law and institutional structure is not adequately designed to facilitate local control and participation and to have an effective transfer of technology. In addition, the policy towards the development of resources has not been a settled and defined one which allows a consistent approach by the state.

The model which has been suggested seeks to outline reforms and propose revisions to the existing one. Its basic objective is to allow the state to progress from a "dependent" to a "mutual interest" development. As a basic requirement in achieving this, the state needs to have a strong national oil company which would operate as a monopolist in the industry.

Presently, the state's role is primarily that of a regulatory agency. The state oil company would represent the state monopoly in the industry and establish its role as an entrepreneur. This would mobolise state effort and provide an effective competitor to the foreign company in the local industry. It is this national oil company which would eventually replace the multinational and allow the state to no longer develop its resources from a position of dependency.

In order to facilitate the working of a national oil company, the mixed economy concept needs to be developed. This requires administrative decentralisation. The state enterprise can only operate efficiently within an administrative framework which is free from the bureaucratic control of the civil service. Further, it is recommend that the existing administration be streamlined. Permanent and well-defined bodies should perform the important advisory, regulatory, entrepreneurical and co-ordinating functions required in running the industry. Administratively, operations are to be organised in a manner which allows state policy to be implemented.

The existing production sharing contract has done little to improve the state's position from the previously used exploration and production licences and leases. As a mechanism for the acquisition of technology, the contract has not been successful. The state's role is that of an approval agency. Its participation and control has not increased. A joint operating infrastructure needs to be built into the agreement. It is also recommended that less reliance be placed on the multinational

corporation as a source of technology. An alternative contractual regime which involves other state national oil companies and governments under bi-lateral agreements would shift the emphasis away from the multinational corporation. Again, this has the benefit of reducing the dependency of the state on the foreign company.

A fundamental objective of the fiscal regime is the providing of fixed rate of return to the investor. It is the finding of this study that the existing tax structure can be re-designed to provide an arrangement which is less cumbersome and more efficient. The proposed system would also update existing practices and satisfy the interest of both parties including the provision of a fixed book keeping rate of return on investment to the investor. Its aim would be to tax profit. Since Trinidad and Tobago does not have a cashflow problem, the suggested system contemplates the removal of certain pre-production assessments as a means of maintaining the viability of marginal fields and allowing the investor to recoup his investment. Tax liability, however, would increase with augumented profit and accumulated pay back on invested capital. As an alternative, another recommendation is made which seeks to impose taxation through a specialised mineral agreement in the rate of return service contract. The recommended "carried interest" formula can be used with any arrangement. It seeks to permit resource exploitation by a state owned enterprise as a means of increasing

the state's take while developing a national technological capability. The reduction in the number of charges, the use of fixed formula assessment and the computerisation of cashflow analysis would all contribute to an efficient system able to accurately assess the taxpayers true liability. At all times, an important consideration was the need for an efficient system which was able to accurately assess the taxpayers true liability.

The sectoral development policy provides an opportunity to the economy to "springboard" into a diversification programme built on petro-chemicals and gas based industries. Development should take place in accordance with a policy for an orderly transfer of technology rather than a "leasing" or "renting" of know how. Again, one should caution that there is a danger in relying solely on the multinational to be purveyors of technology. The existing evidence suggest that such a transfer would be skewed. For this purpose, the study has sought to identify mechanisms for improving the state's capacity for research and development, training and local processing. This includes the creation of a national plan for research and development and a manpower development strategy. Local processing can be undertaken with countries which can provide the technology or financing for this, together with available markets for the product. A sectoral development holding company would best provide the type of commercial acumen required to overseer this type of development.

As a study of a non-O.P.E.C. oil producing country, the findings and suggestions represent a strategy to the development of resources. It provides a model which allows the state to ultimately assume local control and ownership of the industry as a whole. While recognising the need for multinational assistance, it does not encourage a dependency in that interest but rather promotes a general development of the resources and the economy in the interest of the state.

APPENDIX I

PRODUCTION SHARING CONTRACT

FOR

BLOCK

COMPRISING APPROXIMATELY ACRES

BETWEEN

THE MINISTER OF PETROLEUM AND MINES

AND

DATED THE DAY OF 19 ..

CONTENTS

TRINIDAD AND TOBAGO

THIS CONTRACT made in duplicate and entered into on this day of 19 .... By and Between THE MINISTER OF PETROLEUM AND MINES (hereinafter referred to as "the Minister" of the ONE PART and a Company incorporated in and registered in Trinidad and Tobago under Section 298 of Part X of the Companies Ordinance and having a place of business at in Trinidad and Tobago (hereinafter referred to as "the Contractor") of the OTHER PART.

WITNESSETH

WHEREAS the Petroleum Act 1969 (hereinafter called "the Act") provides, inter alia, that the Minister is charged with the general administration of the Act; and

WHEREAS the Minister under Regulation 4 of the Petroleum Regulations 1970 (hereinafter referred to as "the Regulations") made under the said Act, on the 7th day of December, 1973 issued the Petroleum Regulations (Competitive Bidding) Order, 1973 published as Government Notice No. 223 of 1973 by which bids were invited for certain submarine areas described in the First Schedule therein on either or both of the bases set out therein; and

WHEREAS the Contractor being a qualified bidder under the said Order delivered Bids on the 15th day of March, 1974 in accordance with the said Order; and

WHEREAS the said Bid contained proposals for Production Sharing Contracts with respect to certain areas described in the Schedule to the said Order; and

WHEREAS the Contractor has represented to Government that it has the financial ability, technical competence and professional skills necessary to carry out Petroleum Operations and wishes to join and assist Government in accelerating the explortion and development of the potential resources within the Contract Area; and

WHEREAS the Minister, after considering the said proposals contained in the said Bid in accordance with the Act and Regulations has agreed to grant to the Contractor a Production Sharing Contract on the terms hereinafter appearing; and

WHEREAS the Minister by virtue of the authority conferred upon him by the Act and the Regulations and all other powers thereunto enabling him is empowered to enter into this Contract;

NOW THEREFORE in consideration of the premises, mutual covenants and conditions herein contained, IT IS HEREBY AGREED as follows:

CLAUSE I

DEFINITIONS

1.1 In the context of this Contract the words and terms defined in the Petroleum Act 1969 and the Petroleum Regulations 1970 shall have the meanings assigned to them in such

definitions, unless otherwise specified herein.

1.2 As used herein, the following words and phrases shall have the meaning as defined hereunder.

1.2.1 "Affiliated Company" or "Affiliate" means a Company or other entity that controls, or is controlled by a Party to this Contract, or a Company or other which controls or is controlled by a company or other entity which controls a Party to this Contract, it being understood that control shall mean ownership by one company or entity of more than 50% of (a) the voting shock, if the other copany is a corporation issuing stock or (b) the control rights or interests, if the other entity is not a corporation.

1.2.2 "Auxilliary Operations" includes design, construction, operation and maintenance of all pipelines, terminals and other installations downstream of the Fiscalization Point.

1.2.3 "Basement Rock" means any igneous or metamorphic rock or any stratum in and below which the geological structure or physical characteristics of the rock sequence do not have the properties necessary for the accumulation of petroleum in commrecial quantities and which reflects the maximum depth at which any such accumulation can be reasonably expected.

1.2.4 "Calendar Year" means a period of twelve (12) months commencing with January 1 and ending on the following December 31, according to the Gregorian Calendar.

1.2.5 "Commercial Discovery" means the discovery of petroleum in such quantities that the production rates, reservoir performance and recoverable reserves are, in the opinion of the parties, sufficient to justify a commercial development of the discovery.

1.2.6 "Contract Area" means the Submarine Area identified as Block described in the attached Appendix and shown on the attached Plan marked 'A' or such sub-block thereof remaining after surrender pursuant to Clause IV.

1.2.7 "Contract Year" means a period of twelve (12) consecutive months according to the Gregorian Calendar counted from the Effective Date of this Contract or from the anniversary of such Effective Date.

1.2.8 "Effective Date" means the day of 19...

1.2.9 "Fiscalization Point" means the place agreed to by the Parties where Government and the Contract will measure, take and lift their respective shares of Petroleum, so, however, that in the absence of agreement, Fiscalization Point shall be the outlet flange at the terminalor other facility where the Petroleum is measured for delivery to the Parties.

1.2.10 "Government" means the Government of Trinidad and Tobago, its nominee or authorised agency.

1.2.11 "Petroleum Operations" means the exploration, production and dispostion of petroleum under the terms of this Contract.

CLAUSE II

SCOPE

2.1 This Contract is a Production Sharing Contract by which the Minister grants to the Contractor exclusive licence in respect of the Contract Area to search for, a drill and get petroleum in accordance with the provisions herein contained but does not confer any ownership rights of the petroleum in strat or in any other rights in land or otherwise except as provided herein.

2.2 The Contractor shall have and be responsible for the management and execution of all Petroleum Operations and related functions contemplated hereunder for the exploration and exploitation of the petroleum resources from the Contract Area and, in the overall conduct of such Operations, the Contractor shall consult and co-operate with the Government.

2.3 The Minister shall have the right to supervise the operations of the Contractor and shall at any time during the term of this Contract, if he so elects, nominate persons to observe the Contractor's execution of Petroleum Operations under this Contract.

2.4 The Contractor shall provide all technical and financial resources for the Petroleum Operations to be conducted under this Contract and shall be solely responsible for all costs and expenses incurred in this connection without the Government assuming any risk for the results of the work to be performed up to Fiscalization Point.

2.5 During the term of this Contract the total Petroleum Production won and saved from the Contract Area shall be divided between the Parties hereto in accordance with the provision of Clause VII.

CLAUSE III

TERM AND TERMINATION

3.1 The term of the Contract shall be for a period of six years next after the Effective Date, but if Commercial Discovery is achieved in the Contract Area during such period, the Contractor, observing and performing his obligations hereunder, may renew this Contract for a term of twenty-five years from the date of Commercial Discovery and thereater for further periods of five years each upon terms and conditions as may be agreed with the Minister in the light of the circumstances then prevailing.

3.2 Request for the first renewal shall be made to the Minister in writing at least one hundred and eighty days after the date of Commercial Discovery and request for the second renewal shall be made before the end of the twenty-third year of the first renewal.

3.3 If Commercial Discovery is not achieved in the Contract Area within a period of six years this Contract shall automatically terminate in its entirety.

3.4 The Contractor shall be at liberty to terminate this Contract at any time on giving to the Minister not less than one hundred and eighty days notice in writing, provided,

however, that the Contractor shall be obligated to fulfil any obligations or liability imposed on or incurred by the Contractor under this Contract that have not been performed or discharged prior to the date of such termination.

3.5 The Minister may terminate this Contract

(a) for breach of Clause V or of any other terms and conditions contained herein in a material particular, the Minister being the sole judge of such materiality;

(b) or bankruptcy of the Contractor or if the Contractor goes into voluntary or involuntary liquidation;

(c) for wilful misrepresentation by the Contractor in any material particular in the process of applying for the Contractor; and

(d) for failure on the part of the Contractor to pay any sum which may have been awarded against him in arbitration proceedings in accordance with Clause XVII within three months of the date fixed in the award, provided notice shall have been duly given to the Contractor of his obligation to make such payment.

CLAUSE IV

RELINQUISHMENT OF CONTRACT AREA

4.1 The Contractor shall not later than the end of the third year from the Effective Date surrender any two of the four sub-blocks of the Contract Area. The Sub-blocks to be surrendered shall be selected by the Contractor at its sole discretion.

4.2 The Contractor shall be at liberty at any time, to surrender one or more, but not a part of one of the sub-blocks in the Contract Area provided that such surrender shall not affect the Contractor's expenditure or work obligation.

CLAUSE V

WORK AND EXPENDITURE OBLIGATIONS

5.1 The Contractor shall within a period of months from the Effective Date commence such exploration work and undertake such geological, geophysical and other relevant studies necessary for the selection of drilling sites in the Contract Area and shall use his best endeavour to secure the necessary equipment and services for the performance of the work hereunder.

5.2 The Contractor shall drill at least wells in the Contract Area each to a depth of feet or to Basement Rock, whichever is first penetrated, unless problems encountered at a lesser depth from water flow, high pressure, heaving shale or other circumstances, would, in the opinion of both Parties, render further drilling impossible or impracticable, so however, that the provision of Clause 5.7 shall nonetheless apply.

5.3 The Contractor shall commence the drilling for the first well in the Contract Area not later months from the Effective Date and shall continue such drilling without reasonable delay until such well is completed. Thereafter, the Contractor shall undertake drilling of the second well in

like manner and shall complete the said well not later than years from the Effective Date. Drilling operations shall be conducted by the Contractor with due diligence and in accordance with sound international petroleum industry practice.

5.4 If the Contractor is of opinion that additional exploration projects are necessary for the adequate evaluation of the Contract Area, the Contractor shall have the right to carry out such exploration operations to the extent required. he control of Contractor, such periods shall be extended by such periods as the Parties shall agree having regard to the circumstances.

5.6 If a Commercial Discovery is achieved in the Contract Area the Contractor shall, as soon as practicable, commence a programme to exploit the aforementioned Discovery in a manner to be determined by the Contractor and approved by the Minister.

5.7 The Contractor shall spend within years from the Effective Date a minimum of United States Dollars (hereinafter referred to as the "minimum expenditure obligation" on exploration operations stipulated herein; at the end of such; period there shall be determined the sum which the Contractor has spend up to that date and one half of any amount by which the said sum may fall short of the relevant minimum expenditure obligation shall be forfeited to Government.

5.8 The Contractor shall deliver to the Minister on the Effective Date a guarantee acceptable to the Minister for the total amount of the said minimum expenditure obligation.

CLAUSE VI

WORK PROGRAMME

6.1 Within ninety days after the Effective Date, and thereafter at least two months prior to the beginning of each Contract Year, or at such other times as otherwise mutually agreed by the Parties, the Contractor shall prepare and submit for the Minister's approval a Work Programme and Budget for the Contract Area setting forth the Petroleum Operation which the Contractor purposes to carry out during the ensuring Contract Year.

6.2 Modifications of a work programme and Budget may be made by the Contractor from time to time during the Contract Year and any such modification shall promptly be presented to the Minister for his approval.

6.3 Should the Minister wish to propose a revision as to certain specific features of the said work Programme and Budget, or to a modification hereof, the Minister shall, within forty-five days after receipt thereof, so notify the Contractor within the specific period, the presented Programme and Budget or the modificaton thereof shall be deemed to be approved. The details of a Work Programme may be changed in the light of existing circumstances, such changes to be made by mutual agreement of the Parties. The Minister's agreement to a proposed Work Programme and Budget or modification thereof shall not be "unreasonably withheld."

6.4 In the event of an emergency or extraordinary circumstance requiring immediate action, the Contractor shall

take appropriate action to protect the interest of the Parties, its employees and the employees of its contractors. Prompt modification of any action taken by the Contractor shall be given to the Minister. If the Contractor fails to take the necessary action the Minister may take such action as he deems necessary and any costs so incurred shall be borne by the Contractor.

CLAUSE VII

SHARING OF PRODUCTION

7.1 The Contractor shall receive, in consideration for the obligations assumed under this Contract, the following shares of petroleum production (if any) from the Contract Area:

(a) a share of Production (hereinafter referred to as "Share B") equivalent to Petroleum Profit Tax, Unemployment Levy or any other taxes or impositions whatsoever measured upon income or profits which the Contractor in according with Law must pay to Government as specified in Clause X herein; this share shall be returned by the Contractor's tax liabilities specified in Clause 10.2.

7.2 The remaining percentage of the Production (hereinafter referred to as "share C") after the segregation of the volumes referred to in (a) and (b) above shall accrue to Government.

7.3 The shares (A, B and C) shall be allocated in relation to the rate of production and the share allocated to a Government shall include the Contractor's share B as shown in the Table hereunder as follows:-

TABLE

Petroleum Production Rates in Barrels Per Day (BOPD)	Allocation of Petroleum Production	
From 0	Share A	Shares B & C
For each barrel exceeding but not exceeding		
For each barrel exceeding but not exceeding		
For each barrel exceeding but not exceeding		
For each barrel over		

7.4 For the purpose of determining the rate of production in 7.3 above the equivalent of natural gas in barrels of crude oil shall be determined as in Clause 11.3.2 herein.

7.5 Petroleum required and used in producing, gathering and metering of petroleum to the Fiscalization Point shall be used free of cost to the Contractor.

CLAUSE VIII

COSTS

8.1 Within the Contract Area, the Contractor shall assume all the costs of producing gathering and meterig of Petroleum to the Fiscalization Point.

8.2 The Government shall assume its share (related to production delivered to Government) of capital expenditure and operating costs related to Auxiliary Operations and will provide, for its own account, all storage and transportation required for Shares B and C of Petroleum from the Contract Area beyond the Fiscalization Point.

8.3 All capital expenditure and operating costs related to Auxiliary Operations shall be the responsibility of Government and the Contractor severally.

CLAUSE IX

DISPOSITION OF PRODUCTION

9.1 Each Party shall take in kind and separately dispose of its share of production from Fiscalization Point at which point title to production will pass to the Parties.

9.2 Total liftings of Petroleum by the Parties during a Calendar Year will, as far as possible, be made in such manner as to achieve a balance between the respective shares of Petroleum lifted by Government and that lifted by the Contractor during such Calendar Year. Liftings by either Party shall be carried out so as to avoid interference with the Petroleum Operations of the other. In order to achieve this objective, on the achievement of Commercial Discovery, the Parties will enter into detailed arrangements with respect to lifting to their respective shares.

9.3 The Contractor shall be entitled to use associated natural gas produced in the Contract Area for his Petroleum

Operations hereunder or to effectuate the recovery of petroleum by secondary oil recovery operations including repressuring and recycling. Any of such gas not so unused by the Contractor shall pass to Government at the downstream flange of the separator on the production platform free of cost provided that the Contractor shall be entitled to dispose of such gas until facilities are installed by Government.

9.4 The Contractor shall, if requested by Government, undertake to market Government's share of petroleum upon terms and conditions to be agreed at the time of such request.

9.5 If Government elects to export or elects to sell to a third party for the purpose of export, all or any part of Government's Shares B and/or C, of production, then the Contractor or its Affiliate shall have the preferential right to purchase such production at a price to be agreed.

9.6 The Contractor shall have the right, if it so chooses, to export freely its Share A (or any party hereof) of Petroleum Production from the Contract Area provided that if Government's share of production under this Contract is insufficient to satisfy domestic consumption or local industries, the Government shall have the preferential right to purchase such volume of Share A intended for export equal to the volume which the Contractor's Share A bears to the total production derived from areas awarded under Production Sharing Contracts in Trinidad and Tobago.

CLAUSE X

TAXES AND OTHER PAYMENTS TO GOVERNMENT

10.1 The Contractor shall be subject to and must observe the laws in force from time to time in Trinidad and Tobago and nothing herein contained shall be construed as exempting the Contractor from complying with the laws imposing taxes, duties, levies, fees, royalties, charges or similar impositions or contributions which the Contractor would be liable to pay under such laws by virtue of its conduct of Petroleum Operations hereunder.

10.2 The Minister shall pay on behalf of the Contractor out of Share B of production referred to in Clause 7.1(b) of the Contractor's liability to Petroleum Profits Tax, Unemployment Levy or any other taxes or impositions whatsoever measured upon income or profits. The Minister shall furnish the Contractor with the proper official receipts evidencing such payments. The value of the petroleum to be used in making the application to the Contractor's said liability shall be the same as the value used in the computation of the amount of the income giving rise to such liability. The Contractor shall comply with the appropriate laws imposing Petroleum Profits Tax and Unemployment Levy or such other taxes or impositions with respect to the filing of returns relating to Shares A and B on the maintenance of books and records with respect to Petroleum Operations in the Contract Area and shall enable authorized persons to inspect and review such books.

10.3 For the purpose of applying Clause 10.2 the gross income of the contractor in respect of any year of income shall be an amount equal to the sum of:

(a) the total value of Share A of production determined in accordance with the appropriate laws; and

(b) an amount equal to the Contractor's Share B.

10.4 The Minister shall pay and discharge on the Contractor's behalf out of its share C, withholding tax on dividends and other distributions.

10.5 In consideration of the obligations assumed by the Contractor hereunder, the Minister shall pay and discharge on the Contractor's behalf, pursuant to the appropriate laws, import duties and other impositions described in Clause 10.1 which are directly related to the conduct of Petroleum Operations.

10.6 The Contractor shall be liable for and shall pay and discharge on his own behalf all fees, dues (including harbour and port dues), rates, charges or other current payments for any services rendered to the Contractor by Government or statutory authorities including tolls, water and sewerage rates and fees of general application including property taxes, documentary stamp duties, registry patent and copyright fees. The Contrctor shall also be liable for and shall pay and discharge taxes relating to the social laws applicable to its employees.

10.7 If the Contractor is obliged to pay directly any of the liabilities under Clause 10.1, except as provided under Clause 10.6 the Minister shall reimbuse the Contractor within 60 days after receipt of invoice therefor if he is satisfied that the payment was made in respect of an imposition directly and necessarily related to the conduct of Petroleum Operations hereunder. The Contractor shall consult with the Minister prior to making any such payments and the Minister shall assist and facilitate the Contractor in discharging its obligations under Clause 10.1 so, however, that nothing herein contained shall be construed as imposing on the Minister any responsibility for the Contractor's breach or non-observance of any law for which the Contractor will be solely responsible.

10.8 In the event that the Petroleum Operations under this Contract result in losses, the Contractor shall not at any time deduct them from other taxable income in Trinidad and Tobago; similarly other losses in Trinidad and Tobago suffered by the Contractor shall not be deducted from taxable income under this Contract.

CLAUSE XI

BONUSES

11.1 The Contractor shall pay to Government a Signature Bonus of United State Dollars

with ten (10) days of

11.2 The Contractor shall pay to Government a Production Bonus of United States Dollars three (3) years after the date of Commercial Discovery, or, within thirty (30) days after the achievement of Commercial Production, whichever is the earlier.

11.3 Commercial Production shall be deemed to hae been achieved when the production and handling facilities required to effect continuous delivery of petroleum have been first installed.

11.4 Whenever Petroleum Production, as hereinafter defined, first attains the respective levels set out in the Schedule, the Contractor shall pay the respective Production Bonus therein stipulated as follows:

SCHEDULE

Petroleum Production in barrels per day (BOPD)	Production Bonus Payments in US$

11.4.1 "Petroleum Production" means the aggregate production from the Contract Area of crude oil and Natural Gas won and saved, but excluding Petroleum used for operations in the Contract Area up to Fiscalization Point.

11.4.2 To determine - for the purposes of this Clause the equivalent to Natural Gas in barrels of crude oil, each 6,000 standard cubic feet (scf) of Natural Gas shall be equivalent to one barrel of crude oil. "Standard Cubic Foot" means a cubic foot of gas measured at a base temperature of 60 degrees Farenheit at an absolute pressure of 14.7 pounds per square inch.

11.4.3 The level of a production shall be deemed to have been attained when the daily rate of Petroleum Production shall be at the rate given in the above Schedule in any 60 days out of 120 consecutive days.

11.5 The Production Bonus Payments (except for the Bonus payable on Commercial Production) shall be made within thirty (30) days from the last day of the sixty days mentioned in Clause 11.4.3 above.

11.6 Bonues shall not be deductible as an expense in arriving at the Contractor's chargeable income.

CLAUSE XII

GENERAL PROVISIONS

12. In addition to or in furtherance of its rights and obligations herein, the Contractor shall subject to the appropriate laws

(a) purchase or lease all materials, equipment and supplies required to be purchased or leased pursuant to the Work Programme;

(b) furnish all technical aid, including personnel required for the performance of the Work Programme;

(c) advance all necessary funds for the performance of the Work Programme including funds for payment in foreign exchange to foreign third parties who perform services as contractors;

(d) be responsible for the preparation and execution of the Work Programme which shall be implemented in a workmanlike manner and by appropriate scientific methods;

(e) take the necessary precautions for protection of navigation and fishing and the prevention of pollution of the beaches, sea and rivers;

(f) have the right to sell, assign, transfer, covey or otherwise dispose of all its rights and interests under this Contract to any affiliated Company on giving to the Minister written notice thereof beforehand;

(g) have the right to sell, assign, transfer, convey or otherwise dispose of any part of its rights and interests under this Contract to parties other than Affiliated Companies with the prior written consent of the Minister;

(h) have the right of ingress to and egress from the Contract Area and to and from facilite wherever located at all times;

(i) have the right to use and have access to, and Government shall furnish so far as possible, all geological, geophysical, drilling, production and other information relating to the Contract Area held by Government or by any other governmental agency or enterprise;

(j) furnish well location maps returns and data concerning operations in the Contract Area in such manner and detail as the Minister may require;

(k) submit to the Minister copies of all such original geological, geophysical, drilling, well, production and other data as it may compile during the term thereof;

(l) keep proper records and complete books of account with respect to costs and expenses incurred under this Contract with respect to the Contract Area and enable inspection thereof by Government at any time;

(m) prepare, in consultation with the Minister, programmes for industrial and technical education and training of nations of Trinidad and Tobago and carry out such programmes diligently with a view to replacing foreign personnel as soon as practicable and to affording nationals of Trinidad and Tobago every possible opportunity for occupying senior positions in the operations of the Contractor;

(n) award, in consultation with the Minister, two scholarships annually during the term of the Contract in fields appropriate to the Petroleum Industry;

(o) employ citizens of Trinidad and Tobago to the maximum extent possible;

(p) have the right to retain abroad the proceeds from sales of petroleum exported subject to the appropriate laws;

(q) give preference in the purchase of goods and services to those goods and services which are available in Trinidad and Tobago.

CLAUSE XIII

INDEMNITY

13.1 The Contractor shall keep the Minister indemnified at all times against any action, claim or demand of whatever nature which may be brought against the Minister by and third party in relation to any matter arising out of the exercise of the rights granted by this Contract unless such action, claim or demand was due to the Minister's negligence or default.

13.2 In any such action, claim or demand the Minister shall promptly notify the Contractor of the receipt of any writ or other document by him or on his behalf and shall keep the Contractor informed of any steps he intends to take in defence of the same. Upon such notification the Contractor shall render such assistance as the Minister may reasonably require to enable him to properly conduct his defence against any such action, claim or demand.

13.3 If the Minister fails to notify the Contractor as aforesaid or the action, claim or demand is not defended by the Minister, the foregoing indemnity shall not apply.

CLAUSE XIV

EQUIPMENT

14.1 Upon termination of this Contract, the Contractor shall deliver to Government, free of charge, in good order, repair and condition (fair wear and tear excepted) all installations, building, works, pipelines and other articles used in Petroleum Operations in the Contract Area together with all casings, engines, tubings and fixtures below surface level.

14.2 All equipment used in or for the Petroleum Operations to be conducted; hereunder which is the property of or leased from a Contractor or an Affiliated Company of the Contractor shall remain the property of such contractor or such Affiliated Company and shall be imported and exported freely.

CLAUSE XV

THE PETROLEUM ACT AND REGULATIONS

15.1 The Act and Regulations shall be deemed to be incorporated mutatis mutandis into and form part of this Contract unless otherwise provided herein.

15.2 Without prejudice to the generality of the foregoing the Contractor shall in particular

(a) comply with Regulations 78 with respect to the deposit of a guarantee for the conduct of Ptroleum hereunder;

(b) comply with Regulations 42 and 43 in the exercise of general and technical obligations;

(c) have the right to exercise all ancillary rights and rights incidental to the carrying out of Petroleum Operations hereunder in accordance with sections 25-28 of the Act and Regulations 31-39.

(d) comply with the provisions of sections 23 and 24 of the Act with respect to non-resident companies and the services of documents.

CLAUSE XVI

PAYMENTS AND CURRENCY

16. The Contractor shall make payments due to Government hereunder in Trinidad and Tobago or United States currency at the option of the Government or in any other currency acceptable to the Government.

CLAUSE XVII

ARBITRATION

17.1 All disputes arising between the Parties relating to the Contract which cannot be settled by agreement shall be finally settled by arbitration.

17.2 The place of arbitration shall be Trinidad and Tobago unless otherwise agreed by the Parties having regard to the circumstances at the time.

17.3 Arbitration shall be conducted before a panel of three arbitrators, one to be selected by each Party to this Contract and a third who shall be the presiding arbitrator to be selected by the two so selected by the Parties.

17.4 Either Party may initiate such arbitration by giving ten (10) days written notice to the other and requesting the appointment of an arbitrator.

17.5 In the event that either Party fails to appoint an arbitrator with thirty days after receipt of a written request to do so, such arbitrator shall, at the request of the other Party, unless the Parties otherwise agree, be selected by the Chief Justice of Trinidad and Tobago. If the first two arbitrators appointed as aforesaid fail to select or disagree on the selection of the presiding arbitrator within thirty days following the appointment of the second arbitrator then the presiding arbitrator shall, unless the Parties otherwise agree, be appointed at the request of either Party, by the Chief Justice of Trinidad and Tobago.

17.6 The decision of a majority of the arbitrators shall be final and binding on the Parties and the Parties agree that entry of judgement may be entered upon the award of the arbitrators.

17.7 In the event that the arbitrators are unable to reach a decision however, the dispute shall be referred to the High Court of Justice in Trinidad and Tobago.

17.8 Except as provided herein in this Clause, arbitration shall be conducted in accordance with the Arbitration Ordinance, Ch. 7, No. 1.

CLAUSE XVIII

LAW GOVERNING THE CONTRACT

18. This Contract shall be construed and governed by and in accordance with the laws of Trinidad and Tobago.

AS WITNESS the Parties hereto have executed this Contract as of the day and year first hereinabove written.

SIGNED BY)
MINISTER OF)
PETROLEUM AND MINES for)
and on behalf of the)
Crown in right of)
TRINIDAD AND TOBAGO)
in the presence of:)

SIGNED for and on)
behalf of)
)
by)
its President)
in the presence of:)

APPENDIX II

NATIONAL PETROLEUM COMPANY ACT,
Act No. 33 1969 (Trinidad and Tobago)

AN ACT to provide for the establishment of a Company to manage and develop petroleum resources of Trinidad and Tobago, to define the powers and duties thereof and for matters incidental thereto.

[Assented to 25th September, 1969]

Enactment

BE IT ENACTED by the Queen's Most Excellent Majesty, by and with the advice and consent of the Senate and House of Representatives of Trinidad and Tobago, and by the authority of the same, as follows:-

Short title

1. This Act may be cited as the National Petroleum Company Act, 1969.

Interpretation

2. In this Act -

"Board" means the Board of Directors of the Company established by section 9;

"Company" means the National Petroleum Company established under section 3;

"Minister" means the Minister responsible for Petroleum and Mines.

Establishment and incororation

3.(1) There is hereby established a body to be known as the National Petroleum Company.

(2) The Company is hereby created a body corporate.

Functions of the company

4. It shall be the function of the Company to promote the economy of Trinidad and Tobago by undertaking the exploration, exploitation and management of petroleum resources of the Country and by ensuring the more effective participation of the People of Trinidad and Tobago in the development and utilization of these resources.

General powers of the Company

5. For the purposes of discharging its functions the Company may engage directly or indirectly in all aspects of the petroleum or petrochemical industries whether these relate to exploration, exploitation, manufacturing, refining, marketing, transport (by land, sea or air), importing, exporting, purchasing or exchange or any other activity connected with or arising out of these industries.

Specific powers of the Company

6. Without prejudice to the generality of the powers conferred in section 5, the Company shall, subject to section 7, have power to -

(a) operate or manage on assignment from the Government any Government interest in petroleum or other rights in respect of Crown Lands or otherwise and whether these relate to exploration, exploitation, manufacturing or marketing;

(b) acquire shares, stock, bonds or other assets or otherwise participate in any undertaking engaged in the petroleum or petrochemical industries;

(c) cause subsidiary, ancillary or associated companies to be established;

(d) enter into any form of association with other enterprises which will tend to the more effecive performance of its functions;

(e) initiate in connection with its own operations or with those of its subsidiaries or associates training programmes designed to ensure that nationals of Trinidad and Tobago are provided with the training, qualifications and experience necessary to equip them for attaining the highest positions in the petroleum or petrochemical industries;

(f) grant loans to or invest money in any undertaking connected with the petroleum or petrochemical industries;

(g) acquire, hold and dipose of real or personal property or rights in real or personal property;

(h) enter into all such transactions and do all such things (whether or not involving expenditure) as in the opinion of the Board are calculated to facilitate the proper discharge of its function or are incidental or conducive thereto.

Minister may limit powers

7. Notwithstanding the provisions of section 5, the Minister may by order whenever he deems it expedient in the public interest so to do limit the exercise of the powers of the Company to such an extent as he may specify in that behalf and when such order is made the Company shall not exercise any power so limited except in accordance with the special authority of the Minister.

Head Office of Company

8. The Company shall have its head office in the City of Port-of-Spain but may establish branches and agencies elsewhere inside or outside Trinidad and Tobago.

Board of Directors

9.(1) The Company shall be managed by a Board of not fewer than five or more than nine directors appointed by the Minister from among persons who have special qualifications in, and have had experience of, matters relating to petroleum engineering, chemical engineering, business management, geology, geophysics, marketing, labour relations, accountancy, economics, finance or law.

(2) A director shall be appointed for such period not exceeding three years as may be specified in the instrument of appointment but shall be eligible for reappointment.

(3) The Minister may at any time revoke the appointment of a director if he deems it expedient to do so.

(4) A director may at any time resign his office by instrument in writing addressed to the Minister.

(5) The Minister shall appoint a director as Chairman of the Board and if such Chairman resigns or is removed from office as Chairman he shall thereupon cease to be a director.

(6) The Minister may, in the event of the absence or inability of the Chairman, appoint any director to act temporarily in place of the Chairman.

(7) The Minister may appoint any person appearing to him to have qualifications necessary for appointment to act temporarily in place of any director who may be absent or unable to act.

(8) The directors shall be paid such remuneration as the Minister may from time to time determine.

(9) The appointment of any person as a director and the termination of office of any person as such shall be notified in the Gazette.

General Manager

10.(1) There shall be a full-time General Manager of the Company who shall be appointed by the Minister and who shall, subject to the directions of the Board, be responsible for the administration of the Company.

(2) The Minister may if he deems it expedient appoint the Chairman of the Board to perform in addition to his functions as Chairman the duties of General Manager.

(3) The appointment to the office of General Manager shall be for such term not exceeding three years as the Minister may determine but he shall be eligible for reappointment and it shall be a condition of the appointment that it may at any time be revoked by the Minister.

(4) Where the Chairman of the Board is appointed as General Manager and his term of office as Chairman expires or where he resigns or is removed from office as Chairman he shall also cease to hold the office of General Manager.

Board to appoint Secretary, &c.

11.(1) The Board shall appoint a Secretary of the Company (in this Act referred to as "the Secretary") and such other officers and employees as may be necessary for the due and efficient conduct of the business of the Company.

(2) An annual salary that exceeds twelve thousand dollars shall not be assigned to any post in the Company without the approval of the Minister.

Pension Scheme

12. The Company may with the approval of and subject to such terms and conditions as the Governor-General may determine provide, establish and maintain a pension scheme or a provident fund scheme for its officers and employees and in any such scheme different provisions may be made for different classes of officers and employees.

Board to advise Minister

13. THe Minister may require the Board to advise him on any aspect of the petroleum and petrochemical industries on which he seeks advice and when so required the Board shall advise the Minister accordingly.

Delegations by the Board

14. Subject to the provisions of this Act and the approval of the Minister the Board may delegate to any director or committee of directors the power and authority to carry out on its behalf such duties as the Board may think fit.

Meetings

15.(1) The Chairman or in his absence any director appointed to act temporarily as Chairman, shall preside at all meetings of the Board.

(2) The Chairman or in his absence the director appointed to act temporarily as Chairman and three other directors, shall constitute a quorum.

(3) All decisions of the Board shall be taken by a majority of the votes and in any case in which the voting is equal the Chairman or other director presiding at the meeting shall, in addition to his original vote, have a casting vote.

(4) The Chairman may at any time call a meeting of the Board so however that the Board shall meet at least once in each month.

(5) The Chairman shall, within three days of the receipt by him of a requisition for that purpose addressed

to him by any two directors, call a special meeting of the Board.

Directors to declare interest

16.(1) A director whose interest is likely to be affected by a decision of the Board on any matter whatsoever shall disclose the nature of his interest at the first meeting of the Board at which he is present after the relevant facts have come to his knowledge.

(2) A director having the necessary expert knowledge and experience may however, in addition to his normal functions as a director, be appointed by the Board in a special advisory capacity whenever the Board deems this necessary and a director so appointed shall not be deemed to have an interest for the purposes of subsection (1).

(3) A disclosure under subsection (1) shall be recorded in the minutes of the Board and the director making the disclosure shall not be present or take part in the deliberations nor vote at any meeting at which such matter is being considered by the Board.

Board to comply with direction of Minister

17. In the performance of its functions under this Act the Board shall at all times comply with the directions of the Minister.

The assets of the company

18. The assets of the Company shall consist of -

(a) such exploration, exploitation and related rights as may be assigned to it by the Government;

(b) such real and personal property (including things in actin) as may be transferred to it by the Government;

(c) real and personal property acquired otherwise than by assignmewnt from the Government;

(d) that portion of the profits which it may hold for the development of its activities.

Financial Year

19.(1) Subject to subsection (2) the financial year of the Company shall begin on 1st January and end on the 31st December of each year.

(2) The period commencing on the date of the coming into operation of this Act and ending on the 31st December in that year shall be taken to be the first financial year of the Company.

Budget

(3) Not later than three months prior to the end of each financial year subsequent to the first financial year the General Manager shall prepare and present to the Board and the Board shall consider the operations budget of the Company for the next subsequent financial year.

(4) The Board shall as soon as possible after this submit the budget with their comments to the Minister for his approval.

Accounts of Company

20.(1) The Company shall establish and maintain an accounting system in accordance with established practice in the petroleum industry.

(2) The accounts of the Company shall be audited by auditors appointed by the Board and approved by the Minister after consideration of the advice of the Director of Audut. Such accounts together with any report made thereon by the auditors shall be submitted to the Minister within one month of the completion of the audit and shall be laid before Parliament.

(3) The Government may allocate to the Company in respect of any one year the whole or part of any sum required to cover any deficit disclosed by the budget.

Company profits

21.(1) The Company shall conduct its activities along business lines and any profits realized by its operations shall accrue to the Government.

(2) Such proportion of these profits as may be determined by the Minister shall be paid into such national funds as the Minister of Finance may direct and the remainder of such profits shall be used for the purpose of expanding the activities of the Company and for the provision of special reserves or of sinking funds as the Minister may approve.

Overdraft

22.(1) The Company may borrow temporarily by way of overdraft or otherwise such sums as may be required to meet its obligations or discharge its functions.

Borrowing powers of the Company

(2) Subject to the approval of the Minister of Finance the Company may borrow such sums as may required for any of the following purposes -

(a) the provision of working capital;

(b) the acquisition of shares or other interests in companies engaged in the petroleum and petrochemical industries;

(c) the establishment of subsidiary companies and the acquisition of interests in other undertakings;

(d) meeting expenditure chargeable to capital account, including the repayment of any money borrowed by the Company for defraying expenditure so chargeable.

Guarantee of loans

23.(1) The Minister of Finance may guarantee in such manner and on such conditions as he may determine the repayment of any loan raised by the Company under section 22 together with interest on and any other other charges in respect of such loan.

(2) Any sums required for fulfilling a guarantee under subsection (1) shall be charged upon and issued out of the Consolidated Fund.

Exemption from tax

24.(1) The Company shall be liable to tax but the Governor-General may by order exempt it from the payment of any tax imposed by or under any enactment where circumstances so warrant.

Report to Minister

25. Not later than the end of the third month of each financial year a report on the operations of the company during the last preceding financial year shall be submitted by the Board to the Minister and such report shall be laid before Parliament.

Ordinance 20 of 1959
Ordinance 22 of 1961
Act No. 15 of 1966 and Act No. 16 of 1966

26. The provisions of the Exchequer and Audit Ordinance 1959, the Central Tenders Board Ordinance, 1961, the Public Utilities Commission Act, 1966 and the Statutory Authorities Act, 1966 shall not apply to the Company.

Passed in the House of Representatives this 15th day of August, 1969.

G.R. LATOUR
Clerk of the House

Passed in the Senate this 26th day of August, 1969.

J.E. CARTER
Clerk of the Senate

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* The other regions are: NA - North Africa, A & A - Asia & Australia; EU - Europe; S & CA - South and Central Africa; SA - South America; CA & A - Central America and Caribbean.

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