

**ESTIMATES COMMITTEE
1960-61**

HUNDRED AND THIRD REPORT

(SECOND LOK SABHA)

MINISTRY OF STEEL, MINES & FUEL

(Department of Mines & Fuel)

Action taken by Government on the recommendations contained in the Twenty-Second Report of the Estimates Committee [Second Lok Sabha] on the Ministry of Steel, Mines & Fuel—
Oil & Natural Gas Commission.



**LOK SABHA SECRETARIAT
NEW DELHI**

December, 1960.

Agrahayana, 1882 (Saka).

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CORRIGENDA

Hundred and Third Report of the Estimates Committee (Second Lok Sabha)

- Page 3, Column 3, line 6: For "Commission" read "Committee".
- Page 6, Column 3, line 2: *add* "this" after "that".
- Page 9, Column 1, *add* "34" opposite "74".
- Page 31, Column 4, last line: For "advance" read "advice".
- Page 33, Column 4, line 8: For "served" read "solved".
- Page 46, Column 5, line 1: *add* "is" after "this"
- Page 51, Column 5, line 15: For "of" read "if"

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ESTIMATES COMMITTEE

1960-61

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(iv)

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Shri M. C. Chawla—*Under Secretary..*

INTRODUCTION

1. The Chairman of the Estimates Committee, having been authorised by the Committee, present this Hundred and Third Report of the Estimates Committee of the Second Lok Sabha on Action Taken by Government on the recommendations contained in their Twenty-Second Report (Second Lok Sabha) on the Ministry of Steel, Mines & Fuel—Oil & Natural Gas Commission.

2. The Twenty-Second Report of the Estimates Committee (Second Lok Sabha) was presented to the Lok Sabha on the 29th April, 1958. All the replies of Government to the recommendations made by the Committee and other information required in this connection were furnished by the 26th November, 1960. These were considered by a Study Group of the Estimates Committee at their sitting held on the 30th November, 1960.

3. The Report has been divided into four Chapters:

(i) Report.

(ii) Recommendations that have been accepted by Government.

(iii) Replies of Government that have been accepted by the Committee.

(iv) Replies of Government that have not been accepted by the Committee.

4. An analysis of the action taken by Government on the recommendations contained in the Twenty-Second Report (Second Lok Sabha) is given at Appendix X. It would be observed therefrom that out of 54 recommendations in the Report, 28·7% of the recommendations have been accepted. Of the rest, the replies of Government in respect of 42·6% of the recommendations have been accepted by the Committee while those in respect of 28·7% of the recommendations have not been accepted by the Committee.

NEW DELHI;

H. C. DASAPPA,
Chairman,
Estimates Committee.

December 20, 1960.

Agrahayana 29, 1882 (Saka).

CHAPTER I

REPORT

In para 10 of their 22nd Report (Second Lok Sabha) on the Oil and Natural Gas Commission, the Estimates Committee had observed that the Minister for Mines and Oil should not be burdened with the day-to-day work and management of the Commission. They had accordingly recommended that the Commission should have a full-time Chairman or a Vice-Chairman, preferably one possessing technical qualifications, to execute the policies laid down by Government.

2. In reply to the recommendation, Government have stated that the Oil and Natural Gas Commission Act, 1959 had since come into force and the Oil and Natural Gas Commission established as a statutory body with effect from 15-10-59, with Shri K. D. Malaviya, Minister for Mines and Oil as part-time Chairman. It has been further stated that, as soon as possible, a Vice-Chairman would also be appointed to look after the work of the Chairmanship of the Commission in a general way. Further the Minister for Mines and Oil had already decided to attend very few meetings of the Commission. In view of the above, it is held by Government that the Minister of Mines and Oil would not be burdened with the day-to-day working and management of the Commission.

3. The Committee do not consider that the arrangement under which the Minister is the Chairman of what is intended to be an autonomous Commission is quite satisfactory. They feel that once the policies are laid down, the actual execution or implementation of those policies should be left in the hands of the executive for otherwise if the Minister becomes himself part of the executive, it will be difficult for him to question the actions of the executive. Besides, such association of the Minister with the Commission might even affect its autonomous functioning as the independence of the other members is likely to be hampered. The members might hesitate to express their views freely. In this connection, the Committee would point out that in some other countries, particularly in the U.K., there is a line of demarcation between the legal rights of the Board within the field of day-to-day management and the legal right of the Minister to give general directions or to withhold approval. It is obviously undesirable to amalgamate these two functions. The Committee have not come across any similar instance of the Minister's working as the Chairman of a statutory autonomous corporation also in any country having a form of Government comparable to the Indian system. Even in countries having divergent political and legal systems such association of the

Minister with the management of a Corporation does not appear to be favoured.* *The Committee therefore, feel that instead of the Minister functioning as the Chairman, an independent whole-time Chairman, preferably with technical qualifications, should be appointed for the Commission.*

*"An important question is whether the supervising Minister or his representative should himself be part of the management of the Corporation. Generally the answer to this question is in the negative. On this point countries whose legal and political systems are otherwise as divergent as those of Britain, Germany, France, the U.S.S.R., the United States, India, Italy and Australia are unanimous. It is significant that in Germany, where formerly the General Manager of the Railways was also Minister of Transport, there is now a clear separation. The Minister of Transport has considerable powers of supervision but he is emphatically not a part of the management. The Postal Services, on the other hand, have remained under the direction of a Minister." (The Public Corporation—W. Friedmann pp. 561-62.)

CHAPTER II

RECOMMENDATIONS THAT HAVE BEEN ACCEPTED BY GOVERNMENT

S. No. as in appendix III to 22nd Report	Ref. to para No. of the Report	Summary of recommendation/conclusion	Reply of Government
1	2	The Committee feel that if the O.N.G.C. is to function efficiently as an industrial body, it must be armed with sufficient powers and given sufficient status so as to provide flexibility in administration as well as operation. The Commission were informed that a proposal to convert the Commission into a statutory organisation with wider delegation of powers was under consideration but that it may take some time. The Committee fail to understand why there should be any delay in taking a decision on an important organisational matter	4
1	9	The Committee feel that if the O.N.G.C. is to function efficiently as an industrial body, it must be armed with sufficient powers and given sufficient status so as to provide flexibility in administration as well as operation. The Commission were informed that a proposal to convert the Commission into a statutory organisation with wider delegation of powers was under consideration but that it may take some time. The Committee fail to understand why there should be any delay in taking a decision on an important organisational matter	It has now been decided to convert the existing organisation into a Statutory Commission under an Act of Parliament. The legislation will provide for the grant to the Commission, subject to the ultimate control of and accountability to the Parliament, adequate powers to enable it to perform its functions efficiently. [Ministry of Steel, Mines and Fuel (Deptt. of Mines and Fuel) O.M. No. 12/8/58—ONG dated 26-6-1959].

like the status and powers of the O.N.G.C. on which the successful and effective functioning of the venture to find oil would depend to a considerable extent. They recommend that an early decision be taken to convert the Oil & Natural Gas Commission into an autonomous body with suitable provision for control by Parliament.

9 23 Having taken note that the O.N.G.C. has not yet admittedly been systematically organised, the Committee recommend that the Commission, particularly after the suggested reconstitution, should devote its urgent attention to setting all its organisational affairs on a systematic footing.

The recommendation of the Estimates Committee has been noted. Efforts have been continuing to improve and systematize the organisational set up of the Commission. The non-availability of technical personnel, especially at the higher levels, however, continues to be a major difficulty.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58—ONG dated 29-10-1958*].

22 45 The Committee recommend that the O.N.G.C. should develop statistical and analytical techniques for the purpose of realistic budgeting at least in respect of operational expenditure, instead of basing it merely on certain items of expenditure like wages, stores charges, etc. The Committee feel that the entire organisation and the system of accounts should, as early as possi-

A Statistical Section has been set up in the Commission and functions of this section are being enlarged. The Estimates Committee's recommendations will be implemented regarding cost accounting also. Correct budget, on the other hand, it may be mentioned, will depend on whether the plans formulated at the beginning of the year are carried out in full, without being

ble, be put on a more satisfactory footing in consultation with the C.C.A.O. of the Government of India as well as other cost accounts experts. They recommend that the O.N.G.C. should give early attention to all these requirements.

23

The Committee recommend that simultaneously with the setting up of a cost accounts organisation, action should be taken to set up an internal audit organisation to conduct a continuous audit of transactions and payments particularly at the outstations.

46

Steps are being taken to appoint a Chief Accounts Officer in the Oil & Natural Gas Commission and action to set up an Internal Audit Organisation in the Commission will be taken soon after he joins.

26

The Committee recommend that the implementation of the decision taken in regard to drilling in Cambay and Gogha should be expedited.]

64

The site for drilling at Cambay was fixed in February, 1958, and drilling operations by the O.N.G.C. have already been started there. A structural hole will also be put down at Gogha. Shallow drilling is already in progress in Baroda to test the nature of gas indications there.

27

According to an eminent geologist the Ganga Valley area is potentially oil-bearing and that if oil is found in this area it would be in quantities which

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Two Gravity and two Seismic parties of the Oil and Natural Gas Commission had been operating in the Ganga Valley and 2 Geological parties

exceeded or without a short fall. So far there has been no complaint on the over-estimation of costs of project of works.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58—ONG dated 29-10-1958*].

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58—ONG dated 29-10-1958*].

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58—ONG dated 29-10-1958*].

would be commercially profitable. The Committee recommend that view may be given due consideration.

mapped the adjoining Himalayan foot-hills in U.P. during the last field season. The Gravity and Magnetic parties in U.P. have taken observations over 2,250 sq. miles on parts of Barielly, Moradabad and Khatgodam areas. The Seismic parties have covered over 250 line miles of profiles in Moradabad, Chandausi, Bareilly, Shahjehanpur and Hardoi Sections.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58—ONG dated 23-12-1958*].

In view of the various encouraging factors which have occurred in Assam the Committee recommend that Government should attempt at greater exploration for oil in that area than has been the position so far.

The seismic exploration in Assam by the O.N.G.C. has made appreciable progress. Over 125 line-miles of profiles have been investigated. A favourable structure has been located about 6 miles north-west of Sibsagar and deep drilling has been started there from the 19th June, 1959. During the current field season, the exploration in Assam will be further intensified by adding an additional seismic party.

Intensive drilling operations have been in progress in Nahorkatiya, Hugrijan and Moran in Assam since 1953. These areas which were held by A.O.C. under M.L./P.Ls have now to be transferred to Oil India Private Limited from the

date of its incorporation, i.e., 18-2-1959. Upto 31st December, 1958, 47 wells have been drilled out of which 32 have proved successful and 8 dry. Testing for production has still to be carried out in the remaining 7 wells.

Oil India Private Limited have plans to drill 20 wells in 1959, 25 wells in 1960 and 34 wells in 1961.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58—ONG dated 3-7-1959*].

30 It is evident that the progress in regard to the survey and exploration of even the potentially oil bearing areas in the country has been very tardy and has taken short of the targets recommended by the Soviet oil experts. They, therefore, recommend that the O.N.G.C. should give special attention towards preparing and executing a dynamic programme for the surveys, mapping and exploration of potential oil-bearing areas in the country, in as short a period as possible.

32 The Committee were informed by the Ministry that the Petroleum Concession Rules were being revised so as to bring them in line with Industrial Policy Resolution and that pending revision, it was decided by Government in January, 1955 not to grant any fresh petroleum concession.

69 Concrete proposals are being drawn up to intensify the programme of oil exploration in the country. Steps are also being taken to step-up the number of parties for exploration.

[*Ministry of Steel, Mines and Fuel (Deptt. of Mines and Fuel) O.M. No.12/8/58—ONG dated 23-12-1958*].

72 Government agree with the recommendation of the Estimates Committee that the question of exploration, prospecting and mining of oil should be viewed from practical considerations. There is no objection to the association of private enterprise in this task, provided it can be had within

The Committee regret to observe that the Petroleum Concession Rules which were then under revision and consideration have not still been finalised. The policy not to grant licences has thus been in force for nearly 3½ years and what is more, none of the oil concerns seems to be aware of it. The Committee feel that the question of exploration and prospecting and even mining of oil has to be viewed from practical considerations and expediency. At present the resources and know-how of the O.N.G.C. are limited and not all its personnel are sufficiently experienced. A liberal policy should, therefore, be adopted in this matter as has in fact been done in several other countries. While direct exploration, etc. by governmental agencies should continue and in fact should steadily expand, for some years to come, private concerns should to the extent possible be given licences to undertake exploration work, with or without Government participation, depending on the availability of resources, subject, of course, to the requirement of the Industrial Policy Resolution. Further the policy should be flexible to suit each case but not one of vacillation or of inaction. The Committee recommend that early decisions should be taken in all these matters and that they should be announced to prevent any misapprehension in any quarters.

the framework of the Industrial Policy Resolution dated the 30th April, 1956. The revised drafts of the Petroleum and Natural Gas (Leases and Licences) Rules and petroleum and natural gas regulations and Development Rules while *inter alia* providing for the rendering of all information to Government and for supervision over the activities of the concessionaries, are based on a flexible and realistic approach to the problem. These rules are in an advanced stage of consideration and a decision is likely to be reached shortly. The decision reached will be brought to the notice of all concerned.

[Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58—ONG dated 23-12-1958].

The Committee recommend that the Petroleum & Natural Gas (Regulation & Development) Rules should take cognizance of all the changing patterns abroad as well as of the liberalised policies recommended earlier and that they should be such as would make possible and flexible approach rather than any rigid approach. While making provision for payments of royalties, taxes, etc., the rules might provide also for the rendering of all information to Government and for supervision over the activities to ensure that the areas are investigated intensively and that there is no waste of resources. Finally, the Committee recommend that the issue of these revised rules pending for the last three or more years should be expedited.

Government agree with the recommendation of the Estimates Committee that the question of exploration, prospecting and mining of oil should be viewed from practical considerations. There is no objection to the association of private enterprise in this task, provided it can be had within the framework of the Industrial Policy Resolution dated the 30th April, 1956. The revised drafts of the Petroleum and Natural (Gas Leases & Licenses) Rules and Petroleum & Natural Gases (Regulation and Development) Rules while *inter alia* providing for the rendering of all information to Government and for supervision over the activities of the concessionaries, are based on a flexible and realistic approach to the problem. These rules are in an advanced stage of consideration and a decision is likely to be reached shortly. The decision reached will be brought to the notice of all concerned.

e

[Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58—ONG dated 23-12-1958].

The Committee hope that all the projects *i.e.*, production, transport of crude, refining, transport of refined products in respect of the Naharkatiya oil fields as also of Moran oil fields where oil is reported to have been struck, will be executed expeditiously keeping in view the volume of imports which involve delays in production.

This has been noted and efforts are being made for expeditious execution of the projects.

[Min. of S. M. & F.O.M. No. 12-8-1958—ONG dated 28-11-1960].

38 81

The Committee would suggest that the Government policy in regard to distribution of petroleum products after the refineries in the Public sector go into operation should also be determined at an early date to enable action to be initiated sufficiently early for its implementation.

Noted.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O. M. No. 12/8/58-ONG dated 30-7-1958*].

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The Committee suggest that to meet the requirements of technical personnel in the field of geology and geophysics a full fledged all-India Petroleum Technological Institute on the lines of those in France and Russia might be set up preferably at one of the existing institutions in collaboration with them as well as the National Physical Laboratory, the Fuel Research Institute etc.

The matter is being examined and necessary proposals will be formulated shortly

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58—ONG dated 4-3-1959*].

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The Committee recommend that as much training and experience as possible should be given to drillers in large numbers so as to enable them to perform their operations successfully and efficiently.

Arrangements are being made for training a large number of personnel in drilling, for holding classes and for putting them for practical work on the rigs.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58—ONG dated 29-10-1958*].

The Committee would suggest that there should be advance planning particularly in respect of recruitment and training of personnel required for Oil India (P) Ltd., and the two oil refineries to be set up in the public sector so as to enable well-trained Indians to be put in responsible position both on production work and pipelines as early as possible.

Noted. The Ministry have already taken the following actions on the personnel requirements of Oil India and the proposed refineries :—

(a) Provision has been made in the Rupee Company agreement for the training of Indian technical personnel needed by the Government in accordance with a programme to be agreed upon between the Government and the Company.

(b) It has been decided to create a Refinery Project Division consisting of about half a dozen top level technical personnel to handle all technical and organisational matters relating to refineries.

(c) The Standing Committee on Oil and Natural Gas have also considered the question, and as a short term programme, recommended the drawal of Indian technicians employed in the Middle East, Far East, on oil exploration, drilling, refining, etc. besides tapping the existing training facilities in the country.

(d) Five Indian scholars have also been deputed to the French Institute of Petroleum to acquire necessary training. Under the terms of the bond, they will be required to serve the Government first.

[Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58—ONG dated 30-7-1958].

54 102

(i) The Committee feel that there is extensive scope for research in various matters relating to oil technology and suggest that Government should arrange for co-ordinated and well-directed research, particularly on the following which require early attention :

- (i) Reduction of costs of exploration ;
- (ii) Conservation of Resources ;
- (iii) Measures to increase productivity ;
- (iv) Improvement in refining to suit the Indian requirements with particular reference to the demand for kerosene, diesel oil, aviation spirit, lubricants etc. as against surplus of motor spirit ;
- (v) Conversion of fuel oil into diesel oil ;
- (vi) Use of natural gas, e.g., methane, etc., as well as those arising in production and refining of oil ;
- (vii) Development of petro-chemical industry etc.

The matter is being examined and necessary proposals will be formulated shortly. The position in respect of items (iii) to (vii) is indicated below : (iii) to (v). The Oil Refineries operating in the country have been established to produce various refined products in accordance with a specific pattern of production depending upon the type of crude oil used. The type of crude oil processed has a bearing on the proportion of various refined products produced from it. Moreover, there is a limit upto which particular type of products can be produced from a particular type of crude oil and it is not possible to produce large quantities of any particular type of products than of others in any refinery. Subject to these limitations, the refineries are producing the maximum quantity of kerosene, diesel oil etc., in accordance with the market requirements of the country. The production of surplus motor spirit has also been considerably reduced. Efforts are also being made to produce additional products whenever and wherever possible.

Regarding the production of aviation spirit and lubricants, it may be stated that the existing refineries viz., SVRC, BSR and Caltex are not equipped to produce these products. The production of lubricants is an entirely different process

which requires the setting up of new plants involving huge additional capital expenditure.

It may be stated in this connection that Government have recently decided to set up two new refineries in the public sector to process the crude oil produced in Assam. It is proposed to produce aviation spirit and lubricating oil in one of these refineries if found technically possible.

702(ii) They also suggest that the proposed Petroleum Technological Institute recommended earlier should also cater to the research requirements in the country.

(vi) and (vii): The Government have already appointed Italian consultants to advise the Government on the utilisation of natural gas discovered in Assam. The project report received from them is at present being studied and further action can be taken only after the examination is complete.

[Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58-QNG dated 4-3-1959].

CHAPTER III

REPLIES OF GOVERNMENT THAT HAVE BEEN ACCEPTED BY THE COMMITTEE

Serial No. of Recommendation as per Appendix III	Reference to para No.	Summary of recommendations	Reply of Government
1	2	3	4

3 The Commission consists of only one technical Member who is expected to carry out all the technical activities of the Commission. The Committee feel that the absence of experienced technical personnel at the top could lead to wrong directions which considering the magnitude of the expenditure might result in infertuous expenditure. The proposed statutory Commission should, therefore, consist of experienced geologists and geophysicists amongst its technical members, so that the Commission may have the benefit of technical advice from more than one Member. The Committee recommend that the ONGC should be re-constituted on this basis particularly in view of the proposed expansion in its activities.

14 The ONG Commission Act, 1959 has since been brought into effect and the statutory ONGC has been established with effect from 15-10-59. According to Section 4 of this Act, the Commissions shall consist of a Chairman and not less than two and not more than eight other members appointed by the Central Government and the members may be required to render whole-time or part-time service. One of the members is to be a whole-time Finance Member in charge of the financial matters relating to the Commission. The Central Government may, if it thinks fit, appoint one of the members as Vice-Chairman of the Commission.

The statutory Commission has been set up with Shri K. D. Malaviya, Minister for Mines and Oil,

as Chairman (Part-time) and Shri P. C. Bhat-tacharyya as Finance Member and Shri A. M. N. Ghosh who is a highly qualified Geologist, as Member. Shri M. B. Ramachandra Rao, a highly qualified geophysicist has also been appointed as a Member of the Commission. Further, a post of Technical Adviser (Oil) has been created in the Department and it is proposed to appoint Shri A. M. N. Ghosh to that post. Shri Ghosh will also continue to function as a Member of the Commission and will be presiding over the meetings of the Commission in absence of the Chairman. As soon as possible, a Vice-Chairman will also be appointed who will look after the work of the chairmanship of the Commission in a general way. The Minister of Mines and Oil has already decided to attend very few meetings of the Commission.

In view of the above, it will be seen that the Minister of Mines & Oil will not be burdened with the day to day work and management of the Commission.

[Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12-8-59, ONG, dated 21-11-1959].

4 The Committee recommend that when according statutory status to the ONGC, care should be taken to ensure that the top management consists, besides the Chairman and technical members, of non-officials with experience in business and finance but with no financial interest in the industry.

12

Section 4 of the ONGC Act, 1959, lays down the composition of the statutory Commission. This will permit appointment of non-officials as members of the Commission, if found necessary. The inclusion of non-official members, is not considered useful as at this stage the Commission is mainly concerned with exploration

and prospecting for oil. In these matters policies have to be based on technical appraisal furnished by the technical experts and in taking such decisions, businessmen and other non-officials may not be particularly helpful.

[*Ministry of Steel, Mines and Fuel (Department of Mines & Fuel) O.M. No. 12-8-59, ONG, dated 27-11-1959*].

5 13

The Committee are aware that there is a dearth of qualified persons in the country for holding high technical posts. They would, therefore, suggest as a purely temporary measure that it might perhaps be advantageous to employ an experienced and reliable foreign oil Adviser to advise the ONGC in technical matters as well as during discussions with foreign oil concerns with whom the Government and Commission come into contact. For this purpose, the feasibility of seeking assistance from the World Bank or some other similar Agency or under one of the Aid Schemes should be examined.

The Estimates Committee apparently have two functions in mind: (a) Technical Advisers for Exploration, (b) Advisers to assist the ONGC during discussions with foreign oil concerns. The ONGC already have a number of technical experts from USSR for all the branches *viz.*, Geology, Geophysics and Drilling.

Discussions with foreign oil concerns are conducted by the Department of Mines & Fuel. Wherever found necessary, foreign consultants are engaged on *ad hoc* basis for preparing project reports.

[*Ministry of Steel, Mines and Fuel (Department of Mines & Fuel) O.M. No. 12/8/58-ONG, dated 29-10-1958*]

The Committee feel that having set up a technical body of the status of the O.N.G.C. to deal with the exploration/exploitation and production of oil in the country, it should be given the function and responsibility of administering all the activities pertaining to oil in the country, such as exploration including private participation, exploitation, production, refining, storage, distribution, inspection etc. so as to deal with the subject comprehensively. They recommend that this aspect should be given due consideration when the question of giving statutory status to the O.N.G.C. is considered.

It has now been decided to convert the existing organisation into a Statutory Commission under an Act of Parliament. It is envisaged that the functions of the Commission shall generally be to plan, promote organise and implement programmes for the development of petroleum resources and the production and sale of petroleum and petroleum products produced by it and to perform such functions as the Central Government may, from time to time, assign to it. It is proposed that subject to any directions as the Central Government may give to it, the Commission may take such steps as it thinks fit—

- (a) for the carrying out of geological and geophysical surveys for exploration of petroleum ;
- (b) for the carrying out of drilling and other prospecting operations to prove and estimate the reserves of petroleum ;
- (c) to undertake, encourage and promote such other activities as may lead to the establishment of such reserves ;
- (d) to undertake, assist or encourage and promote the production of petroleum from such reserves and its refining ;
- (e) for the transport and disposal of natural gas and refinery gases produced by the Commission provided that no industry which

uses any of these gases as a raw material shall be set up by the Commission except with the previous approval of the Central Government ;

- (f) to undertake, encourage and promote geological, chemical and other scientific investigations whether in or outside the laboratory ;
- (g) to undertake, assist or encourage the collection, maintenance and publication of statistics, bulletins and monographs ; and
- (h) to perform any other function which is supplemental, incidental or consequential to any of the functions aforesaid or which may be prescribed.

It is not proposed to entrust the regulatory functions of inspection and conservation etc. to the Commission as these are purely Governmental functions. The storage, distribution and marketing, except that of petroleum and petroleum products produced by it, existing refineries and the refineries to be set up by the Indian Refineries Limited will also be outside the purview of proposed statutory Commission.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O. M. No. 12,8158-ONG, dated 4-8-1959*].

On 12-5-60 the Committee were informed that :—

“As further suggested by the Estimates Committee, this recommendation was kept in view when a decision was taken to convert the then organisation into a Statutory Commission under an Act of Parliament (Act 43 of 1959). It was found that at this stage it was far more important for the Oil and Natural Gas Commission, irrespective of the status to be assigned to it to concentrate on activities concerning exploration for, and exploitation of, oil resources from various areas. Not only had the Commission's organisation been built up since 1956 primarily for this purpose but also, with the rapid increase in the demand for oil within the country, discovery of indigenous oil was considered of prime importance. Exploration (and exploitation if exploration is successful) activities by themselves are so diverse and difficult that, it was felt, saddling the Commission with over all functions (such as refining, storage, distribution, inspection etc.) would not only entail additional difficulties but might lead to an unwieldy organisation, with too many functions, securing neither economy nor efficiency in any particular operation.

Future developments were, however, kept in view and that the functions assigned to the Commission by the said Act of Parliament provide not only for exploration and exploitation of oil resources but *inter alia* also for its production and storage, and for refining, distribution and sale of its product. So, the Act does not rule out the possibility of Government later, entrusting the Commission with further functions and responsibilities as might be deemed fit at the appropriate stage.

Meanwhile two separate wholly Government-owned Companies have also been incorporated under the Companies Act, 1956. The Indian Refineries Ltd. is to deal primarily with the establishment of two oil refineries in the public sector and the Indian Oil Company Ltd. is to cater the distribution and marketing of petroleum products, not only those to be produced by the Government-owned refineries but also imports of such products as may be considered necessary.

The existing terms of reference and constitution of the Standing Committee are sufficiently comprehensive and it may not be necessary to make any change for the present.

[*Ministry of Steel, Mines and Fuel (Department of Mines & Fuel) O.M. No. 12/8/58-ONG, dated 30-7-1958*]

The Committee feel that to be an effective advisory body, the Standing Committee on Oil set up by Govt., should be consulted on all important matters relating to the Oil Industry in India, e.g., exploration, of oil and petroleum laws, Exploitation, production, refining, collaboration with private concerns, agreements, prices, transport etc. Its advice should be available to the Oil & Natural Gas Commission besides the Ministry, particularly after the former is given independent status as recommended by the Committee elsewhere.

The Committee further suggest that the Standing Committee on Oil should be reconstituted and made broad-based so as to give representation on it not only to the various official interests concerned but also the State Government likely to be interested and non-officials, including members of legislatures who have studied the subject, mining interests etc. This broad-based Committee might then form sub-Committees to deal with groups of allied subjects so as to make for speedy and business like discharge of work.

Whatever the merits of having three separate bodies namely the GSI, the IBM and ONGC to deal with the survey and exploratory work in respect of various minerals in the country, it is very desirable that there should be adequate co-ordination among them so as to avoid overlap and duplication in their activities. The Com-

The Geological Survey of India, the Indian Bureau of Mines and the Oil & Natural Gas Commission are under the administrative control of the Ministry of Steel, Mines and Fuel (Department of Mines and Fuel). The three organisations forward their Five Year Plans separately which is scrutinised by Govern-

mittee recommend that to ensure co-ordination among these bodies, liaison Committees at various spheres should be constituted which should meet at regular intervals and ensure that the plans drawn up by the respective organisations do not overlap those of others or involve duplication of work, personnel, purchases, etc. during the same year or over a period of years.

ment and finally approved after eliminating over-lapping or duplication etc.

(2) The annual programme of each organisation is furnished with full details and sent to the other organisations for comments wherein such data and duplication, over-lapping etc. are considered and eliminated. In addition, a Programming Board, consisting of representatives from these Organisations, has been set up, which scrutinises the annual programme of each of these Organisations.

(3) Thus, adequate machinery already exists to eliminate any over-lapping and duplication of work, personnel, purchases etc. during the same year or over a period of years among these three Organisations.

(4) Further co-ordination is effected through the meetings of Co-ordination Committee of these Organisations which are held in every alternative month. It is considered that sufficient co-ordination is maintained through the meetings of the Programming Board of the Co-ordination Committee. There are also arrangements for

the exchange of monthly progress reports between these Departments, which are designed to ensure the maximum co-ordination of their activities.

(5) In the circumstances stated above, it is considered that the setting up of liaison Committees, at various levels is not necessary. The question of holding meetings of the co-ordination Committee more frequently will be considered, provided there is sufficient matter for discussion.

[*Ministry of Steel, Mines & Fuel (Department of Mines & Fuel) O.M. No. 12/8/58-ONG, dated the 29-10-1958*].

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It is observed that the total actual expenditure incurred by the ONGC in the first two years of the Second Plan period has been Rs. 3 crores as against Rs. 8.7 crores envisaged for this period. Of this the expenditure on operation work has been only Rs. 1.8 crores as against Rs. 8.5 crores recommended by the Soviet experts. The Committee wonder whether at the present rate of expenditure and progress there is any reasonable prospect of fulfilling the targets within the Plan period. It is, therefore, necessary that the ONGC should give highest priority to the drawing of comprehensive plans to fulfil the Plan targets, both monetarily and physically, during the rest of the Plan periods. They also feel that there is

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The expenditure incurred during the first two years of the Second Five Year Plan has of course fallen short of the amount envisaged for this period. The Soviet recommendations were rather of too ambitious a nature considering the fact that the Commission had to start from scratch and there is dearth in the country of technical personnel, equipment etc. During the first year of the Plan period, the Commission was mainly engaged in building up its organisation, recruitment and training of personnel, and procurement of instruments, equipment etc. Besides, the most costly part of oil exploration consists of oil drilling. It was found that greater stress on surface surveys

scope for intensifying the work of survey and drilling and increasing the proportion of expenditure on such work to the total expenditure.

would be more economical than drilling; so the latter had to be postponed resulting in short-fall in expenditure.

The Commission is well aware of the scope for intensifying surveys and drilling. During the current year, the drilling programme of the Commission has made considerable progress. In addition to Jawalamukhi deep well No. 1, deep drilling has already been started at Hoshiarpur and Cambay and will be also undertaken at Sibsagar shortly. In addition, two structural wells are also being drilled on Jawalamukhi structure. It is further proposed to intensify the survey and drilling programme during the remaining part of the Second Five Year Plan and concrete proposals are being worked out.

It has, however, to be borne in mind that in the work of oil exploration there may be certain unexpected circumstances which may necessitate modification of the programme. For example, shifting emphasis from one area to another may become necessary, depending upon the actual results obtained from time to time. While targets may diminish on one side, certain other items of the work may have to increase.

[*Ministry of Steel, Mines & Fuel (Department of Mines and Fuel) O.M. No. 23-12-1958*].

38 Considering the volume of oil the country has to import, it has to strive, leaving no stone unturned, to explore every possible source of oil in the country. One of the main difficulties in doing so is likely to find the finance required for the purpose. The amount of expenditure required to mobilise the oil resources has been estimated to be very large. The Committee would suggest in this connection that the feasibility of setting up an Oil Development Fund or levying a cess on petroleum products or of converting a part of an existing excise duty into a cess and of assigning it to the Commission might be considered. The feasibility of obtaining loans from the World Bank or other U.N. agencies or other sources for developing the oil resources in the public sector might also be considered.

There is no doubt that large finance will be required to explore every possible source of oil in the country and to develop the resources. It is however, not considered necessary to set up an oil development fund or levy a cess on petroleum or convert a part of the existing excise duty into a cess and assign it to the ONGC for this purpose. Funds for the exploration and development of oil will continue to be provided on the basis of requirements and the overall availability of resources, as hitherto. Moreover, oil exploration, to a very great degree is self-financing, i.e. after a certain initial expenditure, and provided oil is struck, much of the rest of the cost of development may be available from the profits made by the business.

The possibility of obtaining assistance for the development of oil resources in the public sector from possible external sources is already being explored.

[Ministry of Steel, Mines & Fuel (Department of Mines & Fuel) O.M. No. 12/8/58-ONG, dated 29-10-1958].

40 It has been represented to the Committee that the unit cost of operation in the ONGC is very low as compared to that in Canada, as far as exploration is concerned. The Committee feel that such an empirical deduction would not be correct in the absence of full comparative details such as size of party, quantitative and qualitative,

Full comparative details of the seismic and gravity parties, their output are brought out in the 'A' statement attached (Appendix I). The output of individual in a party cannot be satisfactorily equated, but the output of the whole team, will have to be considered. Then considered in that light, it will be seen from the statement

output per individual in terms of area surveys etc., for the various organisations referred to above. The Committee would suggest that a fair comparison between the unit cost of operation of the ONGC should be attempted by the ONGC and the Committee apprised of it in due course.

attached that unit cost of operation of ONGC's teams is certainly smaller and compared favourably with those in other countries such as Canada, or the SVOC in India or even of other foreign seismic companies who have offered to do seismic work on contract basis in India for the Commission.

[*Ministry of Steel, Mines & Fuel (Department of Mines & Fuel) O.M. No. 12/8/58-ONG, dated 23-12-1958*].

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41 The Committee feel that the costs of exploration according to ONGC standards are higher than the Soviet experts standards, which would indicate, that there is scope for reducing the costs of exploration in India by ONGC. They therefore, hope that as a result of the review suggested by them it would be possible to reduce the exploration costs in India.

It appears that the position was not explained fully and the statement quoted in para 41 of their report has been misunderstood by the Estimates Committee. The fact that the Soviet experts drew up their estimates without giving a detailed break-up of their estimated expenditure for the various operations and without taking into consideration all the items of expenditure for the various programmes suggested by them. When the Oil and Natural Gas Commission worked out the figures for the programmes laid down, the estimated cost came higher by about Rs. 15 crores. The estimates mounted mainly on account of the inclusion of the undermentioned items. Of these some had been omitted by the Russian Experts, whereas others had been

suggested by them in their report, but apparently not provided for in their estimate of expenditure:

Items	Cost (in lakhs) Rs.
1. Turbine drills	550.00
2. Electro-logging equipment	20.00
3. Gas logging equipment	12.00
4. Heavy trailers	10.00
5. Excavators, bull-dozers, etc. for construction teams	35.85
6. Compensation for damage to crops and	50.27
7. Customs, freight and insurance	169.33
8. Office and Residential accom- modation (our estimated cost is Rs. 518.46 lakhs but the Russian experts appear to have provided Rs. 45.00 lakhs only)	473.46
9. Training in India and abroad	29.56
10. Foreign consultants, advisers and specialists	12.50
11. Unforeseen contingencies (5% of the capital expenditure and operational cost	190.16
	1,553.13

Since the Oil & Natural Gas Commission is starting a new enterprise, with little or practically no experience, it would be difficult to lay-down rigid estimates. The fact that the Soviet experts estimated an expenditure of Rs. 30·7 crores, does not itself show that their is scope for reducing the cost of exploration in India by the Commission. The Commission is in constant touch with the Soviet experts and no opportunity shall be missed in actual practice to reduce the cost of our exploration, if reduction in the expenditure were possible consistent with quality and optimum turn-over.

[*Ministry of Steel, Mines & Fuel (Department of Mines & Fuel) O.M. No. 12/8/58-ONG, dated 23-12-1958*].

21 44 The Committee feel that one of the reasons for defective budgeting and planning might be the system of accounts followed by the O.N.G.C. They consider that the ONGC should maintain accounts in a commercial form and that they should be available for scrutiny in that form. The Committee, therefore, recommend that the Commission should take immediate steps to draw up and maintain commercial accounts of its expenditure or at least to maintain them in a proforma manner.

Proforma accounts are usually maintained by Departmental authorities in such form as may be agreed upon between the Comptroller and Auditor General and the Government of India. Since the Oil & Natural Gas Commission has so far been engaged on exploration only, and there is no revenue at all, maintenance of commercial accounts would not serve any useful purpose.

It has since been decided to convert the existing organisation into a statutory Commission under

an Act of Parliament. It is envisaged that the statutory Commission will have wider functions. The form in which the accounts of the statutory Commission will be maintained will be decided in consultation with the Comptroller and Auditor General of India. The suggestion made by the Committee will be taken into consideration while deciding the form in which accounts of the statutory Commission are to be kept.

[*Ministry of Steel, Mines & Fuel (Department of Mines & Fuel) O.M. No. 12/8/58-ONG, dated 3-7-1959*].

The ONGC proposes to take up shortly for exploration portions of the Bengal basin which are not covered by the Indo-Stanvac Petroleum Agreement. One Gravity and one Seismic party will be operating in that area in the coming field season. If any favourable structures are located, the question of drilling of these structures will be considered.

[*Ministry of Steel, Mines & Fuel (Department of Mines & Fuel) O.M. No. 12/8/58-ONG, dated 29-10-1958*].

Noted. The Industrial Policy Resolution dated 30-4-1956 included mineral oils in Schedule 'A' thereto amongst industries the future development of which would be the exclusive responsibility of State; and all new units in which, save where their establishment in the private sector had already been approved, would be set

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The Committee understand that West Bengal was considered a promising area by the Soviet and other experts. They, therefore, hope that these views would be taken into account in determining the exploration policy for future and that measures would be taken to explore the oil potentialities of this region.

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The Committee would recommend that the co-operation of the private sector may also be obtained in the task of the exploration of oil within the framework of the Industrial Policy Resolution of 30th April, 1956 under which the expansion of the existing privately-owned units or the possibility of the State securing the co-operation of

private enterprise in the establishment of new units when the national interests so require is not precluded and the State has to ensure in such cases either through majority participation in the Capital or otherwise, that it has requisite powers to guide the policy and control the operation of the undertakings.

up only by the State. This did not preclude the expansion of the existing privately-owned units, or the possibility of the State securing the co-operation of private enterprise in the establishment of new units, when the national interests so require. But it was laid down that, whenever co-operation with private enterprise would be necessary, the State will ensure either through majority participation in the capital or otherwise that it would have the requisite powers to guide the policy and control the operations of the undertaking. The Petroleum Concession Rules, 1949—as they stand—do not at all provide for implementation of this settled policy of Government. The draft Petroleum and Natural Gas (Licences and Leases) Rules, which when finalised, would replace the Petroleum Concession Rules, 1949, provide for participatory schemes in which the Government and private enterprise can coordinate effort. Although the Government is keen to strengthen its own technical personnel and is planning to acquire more equipment for its prospecting & mining programmes, it is not averse to participatory schemes, provided that suitable terms are offered.

[Ministry of Steel, Mines & Fuel (Department of Mines & Fuel) O.M. No. 12/8/58-ONG, dated 4-3-1959].

73 The Committee feel that the employment of a number of private contractors for exploration and prospecting work, particularly for drilling, would hasten the work and also enable proper comparison to be made of the expenditure incurred by different agencies so as to control and economise the cost.

It is doubtful if exploration work, *i.e.*, either geological mapping or gravity surveys or seismic investigations could be got done by the contractors more economically than by our own teams departmentally. As regards drilling, it is considered that departmental work will prove cheaper in the long run than contract work once Indian drilling personnel take complete charge of the drills from foreigners. The ONG Commission have obtained the help of foreign technicians and engineers to the extent necessary for the operations of its exploration and drilling parties and training of Indian personnel. As no Indian drilling contractors are available, utilisation of contractors would involve avoidable expenditure of foreign exchange and prolong the period of dependence on foreign experts. The existing methods besides providing for economy in the expenditure of foreign exchange and better facilities for training of Indian staff, also increase the employment potential of the scheme. In any case, the Commission has been considering the offers of the private contractors and if the terms and conditions are favourable, the Commission will not hesitate to utilise such services.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58-ONG, dated 29-10-1958*].

75 The Committee suggest that the data collected by the Oil & Natural Gas Commission may also be

on this matter and in view of the advance given

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got examined on regular basis by independent foreign as well as Indian experts. For this purpose, they would suggest that the feasibility of setting up a panel of such consultants and/or technical advisory Committee of independent experts might be examined.

by them it is considered that the constitution of a Panel of Consultants/*Ad hoc* Advisory Body for examination of the data collected by the Oil & Natural Gas Commission would not be desirable for the following reasons:—

(a) The data collected by the Oil & Natural Gas Commission has to be treated as confidential and hence it is not advisable to place it before a panel of consultants;

(b) There is an acute shortage of highly qualified oil technicians in India and therefore it will be difficult to constitute a body of consultants as desired by the Estimates Committee;

(c) The Commission is already placing its data before the foreign experts working in Oil & Natural Gas Commission;

(d) It is not considered advisable to show the data of the Commission to any of the experts of the oil companies working in India;

(e) Where consultation is required on any specific points, the Commission can consult any expert in any country by paying his fee;

(f) Even private companies exploring for oil do not have a specific panel of consultants.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58-ONG, dated 10-7-1959*].

The issues involved in the proposals were such that they could not be served without proper and detailed negotiations. The time taken by the Ministry for negotiation was necessary under the circumstances.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58-ONG dated 30-7-1958*].

The Committee consider it unfortunate that as a result of the delay in reaching an agreement with AOC for five years for exploitation of Nahorkatiya crude the country has had to import petroleum products of the estimated value of Rs. 40-50 crores of a year. It was explained that the protracted negotiation which preceded the agreement were due to the desire of the Government to get reasonable terms from AOC to exploit the reserves. The Committee hope that the lessons learnt from the negotiations would be kept in view when similar negotiations are entered into in future.

The Committee recommended that consideration of the proposals from Indian enterprises to set up refineries in India may be expedited keeping in view the provisions of the Industrial Policy Resolution of 30th April, 1956.

“Noted. The sponsors of the Bhavnagar refinery were advised on 25-5-58 that in view of the fact that the Government were pursuing a policy of having oil refineries in the public sector in consonance with the Industrial Policy Resolution of 1956, their proposal could not be supported for the present.”

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58-ONG dated 30-7-1958*].

44 88 The Committee recommend that the question of laying down standards and specifications for supply of petroleum products in India which is under the consideration of the Indian Standards Institution for the last three years be expedited. They further recommend that a suitable machinery be also devised to enable effective quality control to be exercised.

The Indian Standards Institution has already laid down specifications for some of the Lubricating Oils and Greases. For laying Standards for major Petroleum products, *viz.*, Motor Spirit, Aviation Gasoline, Kerosene, Diesel Fuels, etc., a Sectional Committee was formed under the Chemical Division Council of the I.S.I. The Sectional Committee has set up six Sub-Committees for preparing draft Specifications for different petroleum products and for drawing up draft Standards on Method of Tests and Petroleum Measures.

2. At the Sub-Committee level, a standard is initially prepared by the Convener, selected out of the members of the Second Committee by a somewhat lengthy process of discussions in meetings and by obtaining comments after circulation of the draft Standards and having further discussions at Sub-Committee level, if necessary. The recommendations are thereafter submitted to the Sectional Committee which normally meets once in a year. The Sectional Committee either accepts the draft Standard for wide circulation for Comments within three months or it refers back the draft Standard to the Sub-Committee for further improvement, if so considered necessary. The Standards are finalised at Sectional Committee

meetings. In the finalised state, the standard specification is again circulated to the Members, etc., for scrutiny after which it is submitted to the Chairman of the Chemical Division Council for final approval. The draft specification is thereafter printed and published as I.S.I. Standard.

The procedure for drawing specifications, as stated above, is lengthy, cautious and inevitably slow, which is normally the case for all highly technical matters. However, necessary action has been taken to expedite the formulation of the I.S.I. Standards for Petroleum products.

3. Processing of Petroleum products is a highly specialised technique where quality control is rigidly followed at every step from distillation to blending of finished products. The imported products, as well as those manufactured in the country conform to Standard Specification as laid down in U.K. and U.S.A. and by our Defence Services, D.G.C.A. and D.G.S. & D.

4. Supplies against Defence requirements are tested in their own Laboratories at Kanpur and elsewhere; for civil Government requirements, quality control tests are carried out at the Government Test House, Alipore. The latter also carries out tests according to specifications on commercial basis.

5. The Defence Services draw their supplies of Petroleum products from oil companies' storage

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Installations at Ports and Refineries and they draw representative samples from these sources for testing for quality control measures. Representative samples are also drawn and tested at the Government Test House before supplies are made by the oil companies to Civil Government Indentors and the DGS&D Contractors. The oil companies do not segregate stocks and the same sources of supply as are used for supply to the Defence Services and other civil Govt. Departments, are also used by them for their general trade. Quality Control measures are, therefore, also adequately enforced on all Petroleum products supplied in the country. The existing quality control arrangements are working well and satisfactorily.

[Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58-ONG dated 29-10-1958].

The Committee consider the delay in recruitment of personnel as unfortunate but feel that with sufficient planning and forethought, these delays could have been avoided. They hope, however, that the difficulties will be reduced when the Commission is given corporate status as recommended earlier.

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All efforts are being made to reduce recruitment delays to the minimum.

[Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O. M. No. 12/8/58-ONG dated 29-11-1958].

Further information called for *vide* Lok Sabha Secretariat O. M. No. 52-PU/58 dated 5-1-60 was furnished by the Ministry of Steel, Mines & Fuel in March 1960 *vide* O. M. No. 12/8/58-ONG dated 17-3-60—See Appendix II.

47 A view was expressed to the Committee by a senior geologist that the mass recruitment of young officers not all of whom had full fundamental and theoretical training in Geophysics might at a later date result in partly trained personnel becoming 'senior men' under whom fully trained men to be recruited henceforth will have to work in lower grades and that this might not be conducive to the building up of efficiency or morale in the new organisation. The Committee would suggest that this view should be given due consideration and the desirability of imparting to these officers an intensive theoretical and practical course in specialised institutions for at least 6 to 8 months, might be examined. They would suggest further that the desirability of attaching these officers for some time as understudies to experienced personnel of the Indo-Stanvac project, AOC etc., besides the ONGC may also be examined. In this connection they would urge that steps be taken to ensure that the foreign enterprises extend effective training to Indian trainees attached to them.

92 The apprentice Geologists and Geophysicists recruited in August, 1956, have gone through the course of prescribed studies and attended lectures and practical work by experts in each of the subjects. The officers also successfully passed the examinations held by the UPSC. After their appointment as junior Geologists and Geophysicists (Jr.) they have been attached to field parties and they have now gained considerable experience for practically two field seasons. Arrangements are being made to impart further theoretical training through seminars at Headquarters, when the officers return from the field. A detailed five year project has also been drawn up to send these officers abroad for 6 months to a year under the various aid-schemes. Many experts who have come in contact with these newly recruited junior officers have expressed satisfaction at the ability, zeal and manner in which these officers have been discharging their duties. Some of the officers of the Commission are being attached with Indo-Stanvac Petroleum Project and A.O.C. for training.

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[Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O. M. No. 12/8/58-ONG dated 29-10-1958].

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52 98 The Committee feel that it could be possible to lay down certain norms and work loads for staff, particularly in the technical staff so as to maintain them at optimum level. In this connection, the review of output with reference to that in other countries and private companies suggested in para 40 is also pertinent. The Committee suggest that all this be done expeditiously and further recruitment made thereafter.

Further information called for *vide* Lok Sabha Secretariat O.M. No. 52-PU/58 dated 5-1-1960 was furnished by the Ministry in May, 1960 *vide* their O. M. No. 12/8/58-ONG dated 20-5-60 (See Appendix III).

It is not practicable to lay down rigid norms of work for all types of technical staff in a party. Conditions vary from place to place even within a single area. For instance, if a seismic party can cover an average of two miles per day under normal conditions of work, it may encounter very hard drilling conditions or meet with other difficulties like scarcity of water, larger depths of drilling etc., and thus suffer progress for no fault of the operators concerned. However, targets of work for each area are being prescribed as far as possible anticipating the probable conditions in the operational areas.

[Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58-ONG dated 29-10-1958].

53 99 The Committee while appreciating the assistance given by the Soviet and Rumanian experts so far recommend that understudies should be provided in adequate measure to all these experts

Adequate number of Indian understudies are provided. The Soviet and Rumanian experts are doing every thing possible in order to train Indian technicians. The question of obtaining foreign

to enable them to take over their duties as early as possible, retaining a few experts thereafter mainly for advisory work. Further, the feasibility of obtaining experts for this purpose under the various aid schemes may also be explored.

experts under the various aid schemes is also being explored.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O. M. No. 12,8/58-ONG, dated 29-10-1958*].

CHAPTER IV

REPLIES OF GOVERNMENT THAT HAVE NOT BEEN ACCEPTED BY THE COMMITTEE

S. No. in Appendix	Reference to para No.	Summary of Recommendation	Reply of Govern- ment	Comments
1	2	3	4	5
2	10	<p>The Committee feel that the Minister for Mines and Oil should not be burdened with the day-to-day work and management of the Commission and that a Chairman or a Vice-Chairman preferably with technical qualifications should be appointed on a full time basis to execute the Policies laid down by Government.</p>	<p>The ONG Commission Act, 1959 has since been brought into effect and the statutory ONGC has been established with effect from 15-10-59. According to Section 4 of this Act, the Commission shall consist of a Chairman and not less than two and not more than eight other members appointed by the Central Government and the members may be required to render whole-time</p>	<p>The Committee do not consider that the arrangement under which the Minister is the Chairman of what is intended to be an autonomous Commission is very satisfactory as they feel that the Minister should not generally associate himself with the actual execution of the policies of Government. Besides, the association of Minister for Oil and Mines, might even deprive the commission of its</p>

or part-time service. One of the members is to be whole-time Finance Member in charge of the Financial matters relating to the Commission. The Central Government may, if it thinks fit, appoint one of the members as Vice Chairman of the Commission. The statutory Commission has been set up with Shri K. D. Malaviya, Minister for Mines and Oil as Chairman (Part-time) and Shri P. C. Bhattacharyya as finance Member and Shri A.M.N. Ghosh who is a highly qualified Geologist, as Member. Shri M. B. Ramachandra Rao, a highly qualified geophysicist has also been appointed as a member of the Commission. Further, a post of Technical Adviser (Oil) has been created in the Department and it is proposed to appoint Shri A.M.N. Ghosh to that post. Shri Ghosh will also continue to function as a Member of the Commission and will be presiding over the meetings of the Commission in absence of the Chairman.

usefulness as Members are likely to feel embarrassed and might even hesitate to express their views freely. They, therefore, feel that a separate whole-time Chairman preferably with technical qualifications should be appointed to execute the policies laid down by Government.

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As soon as possible, a Vice-Chairman will also be appointed who will look after the work of the chairmanship of the Commission in a general way. The Minister of Mines & Oil has already decided to attend very few meetings of the Commission. In view of the above, it will be seen that the Minister of Mines & Oil will not be burdened with the day to day work and management of the Commission.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58-ONG, dated 27-11-1959*].

The Committee have recommended earlier that the Commission should consist of a full-time Chairman and technical Members. Once this is done, it should be possible for the Members to function as Heads of the Directorates and it might

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The Committee do not consider that there is adequate justification for having full time members of the Commission in addition to the heads of directorates. The fear expressed in the reply of Government that the Committee's suggestion to appoint

no longer be necessary to retain the posts of the three Directors. These suggestions would also be more or less in accord with those made by the various oil experts who visited the country. The Committee recommend that all these aspects should be borne in mind when reconstituting the O.N.G.C., and also while creating the posts of Chief Geologist and Senior Drilling Engineers. This is particularly necessary so that the suggested constitution itself may not result in more senior officers being engaged than necessary.

man and not less than two, and not more than eight members appointed by the Central Government and the members may be required to render whole-time or part-time service. One of the members is to be a whole-time Finance Member in charge of the financial matters relating to the Commission. The Central Government may, if it thinks fit, appoint one of the members as Vice Chairman of the Commission.

2. At present, the Commission consists of one Chairman, two technical Members and a Member for finance. The Commission can be set up either as a composite body or as a small Commission with various executive heads, as at present. The Estimates Committee suggested that the Members should be the *de facto* Heads of Department and that the posts of Directors and other senior posts, such as Chief Geophysicists and Geologists etc.

heads of directorates as members would make it unwieldy does not seem to be very justified because they consider that there is room for reducing the number of the heads of directorates themselves.

should be done away with. If the Members of the Commission are to act as Heads of Departments, it would necessitate a Member for each of the items for which the Commission is responsible. The activities of the Commission include *inter alia* (a) carrying out geological and geophysical surveys for exploration of petroleum (b) carrying out drilling and other prospecting operations to prove and estimate the reserves of petroleum (c) undertake, encourage and permit such other activities which would lead to the establishment of such reserves (d) undertake, assist or encourage and promote the production of petroleum from such reserves and its reserves (e) transportation and disposal of natural gas and refinery gases produced by the Commission, (f) undertake, encourage and promote geological, chemical

and other scientific investigations whether in or outside the laboratory (g) undertake, assist or encourage the collection, maintenance and publication of statistics, bulletins and monographs and (h) perform any other function which is supplemental, incidental or consequential to any of the functions aforesaid or which may be prescribed. If the Members of the Commission are to act as Heads of Departments, it would necessitate a Member for each of the items for which the Commission is responsible. The requirement of Members would then be as follows:

Member (Geology),
 Member (Geophysics),
 Member (Drilling),
 Member (Production),
 Member (Administration),
 Member (Planning), and
 Member (Finance).

It would also result in saddling them with considerable amount of office work which would leave them with little time for direction of policy in technical

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matters which would seem to be the main purpose.

It is desirable that Members should be responsible for evolving major policies and for higher direction and control. If they are saddled with direct executive responsibilities, they are bound to get bogged down in details and lose sight of broader perspective. The advantage, therefore, lies in continuing the present structure of having a small body of members for Direction and Supervision with Executive Heads.

[*Ministry of Steel, Mines and Fuel*
(*Department of Mines and Fuel*)
O. M. No. 12/8/59-ONG dated
28-3-1960].

This connected with Serial No. 24 (para 48). Having examined the reply and the statement furnished by the Government with the reply (Appendix

The Committee feel that the Branch Offices of the ONGC have grown up in a somewhat haphazard fashion employing technical staff in cities as well as large office staff and lower staff.

The position regarding the Branch Offices of the ONGC has been carefully reviewed. It is considered that in view of the increasing tempo of ex-

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IV) the Committee are of the opinion that there is very little justification for the existence of the Branch Office at Delhi. They doubt whether liaison with Government could be done at the Branch Office level. They feel that the location of the office in Delhi has defeated the very purpose of locating the liaison office of the Commission at Dehra Dun. They, therefore, reiterate their suggestion that the Branch Office at Delhi should be abolished.

ploration work, it is neither possible to abolish nor decrease the staff in the various branch offices. A statement showing the functions of the various Branch Offices is attached (Appendix IV A). It would be noticed therefrom that the functions of these offices cannot be conveniently carried out from Dehra Dun or by the Ministry.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58-ONG dated 4-8-1959*] ^{vide}

Further information called for *vide* Lok Sabha Secretariat O.M. 52-Pu/58 dated 5-1-60 was furnished by the Ministry of Steel, Mines & Fuel in May 1960 *vide* O.M. No.12/8/58-ONG dated 20-5-60 —See Appendix IV.

The object of the recommendation obviously was that there should be no duplication between the Government and

The Branch Office at Delhi particularly seems to have very little justification since the work, if any, could be done by the Ministry itself. There is a Private Secretary (Rs.300-400), and one Selection Grade Stenographer (Rs.200-300) attached to the Member (Finance). Similarly the Jawalamukhi Office includes a Public Relations Officer who is stated to be mainly concerned with land acquisition. Further, the Branch Office at Calcutta might concentrate on work relating to liaison with the Indo-Stanvac Project. The Committee recommend that there should be a complete review of the functions of the Branch Offices particularly in regard to the receipt and purchase of stores with a view to their abolition or at least a reduction in their strength.

It has now been decided to convert the existing organisation into a statutory Commission under an Act of Parliament. It is

While the Committee agree that policy matters on which Government decisions are required have to be dealt within the

Ministry, they feel that with the autonomous set-up and with increased functions and responsibility recommended by them for the Oil & Natural Gas Commission the work undertaken in the Ministry as well as the staff employed therein should be reduced and handed over to the Oil & Natural Gas Commission. The Committee, therefore, recommend that the proposal to add one Deputy Secretary and two Under Secretaries in the Department of Mines and Fuel to cope with the increase in work should be reconsidered.

contemplated that apart from its advisory functions, the statutory Commission will undertake exploration, prospecting and production of petroleum. It will also undertake the refining of petroleum produced by it and if necessary set up associated industries for utilisation of petroleum and refinery gases thus produced. It may also undertake or arrange the sale of its products. Thus even though there will be an increase in the functions and responsibilities of the Commission, it will not take over the work being handled in the Ministry. The Ministry will continue to be responsible for the overall planning and formulation of policies relating to Oil. It will also continue to deal with Petroleum Legislation, Petroleum Concessions, and problems of conservation and development. The work relating to the administration of statutory Oil

the Oil & Natural Gas Commission and that the expenditure resulting from such duplication should be avoided. It is not clear from the reply whether the functions of the Oil and Natural Gas Commission and the Government are clearly defined and demarcated so as to obviate duplication. The Committee, therefore, reiterate this recommendation.]

and Natural Gas Commission, agreements relating to existing refineries, Oil India (Private) Ltd., and Indo-Starvac Petroleum Project, requirements of Oil Industry, imports, pricing and distribution of petroleum products will continue to be the responsibility of the Ministry. The various projects relating to the transportation and refining of the Assam Crude, utilisation of natural gas, setting of lubricating oil plant etc. will also continue to be dealt with in the Department of Mines and Fuel. In view of this and the anticipated increase in the consumption of petroleum and its various products, the magnitude of work to be handled in the consumption of petroleum and its various products, the magnitude of work to be handled in the Ministry will increase still further. The question of transfer of any staff of the Ministry to the Commission does not, therefore, arise. The strength of the staff of the Oil Division in the

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Ministry is fixed in consultation with the Finance and is reviewed periodically. There is no scope for any reduction.

[*Ministry of Steel Mines and Fuel*
(*Department of Mines and Fuel*)
O.M. No.12/8/58-ONG dated
10-7-1959]

Further information called for *vide* Lok Sabha Secretariat O.M. No. 52-Pu dated 5-1-60 was furnished by the Ministry of Steel, Mines & Fuel in March 1960 *vide* O.M. No. 12/8/58-ONG dated 17-3-60 —See Appendix V.

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The Committee feel that, besides A Petroleum Consumers' Having examined the reply of the the above Standing Committee Advisory Council has since been Ministry and the Departmental

it might the desirable to form a Consumer Council to protect the consumer interests of various petroleum products. They, therefore, recommend that this question be expeditiously examined.

constituted, *vide* this Department's Resolution No. 26(7)/58-PS, dated the 12th May, 1958.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O.M. No. 12/8/58-ONG, dated 29-10-1958*].

Resolution the Committee observe that there are no public representatives to directly reflect the consumers opinion included in the Consumers Advisory Council. They therefore, recommend that the council be reconstituted and made broad based including therein M.Ps or M.L. As. so that the consumers are fully represented on it.

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The Committee feel that pursuant to the provisions of the Industrial Policy Resolution of 30th April, 1956, which envisages *inter alia* that workers and technicians should, wherever possible, be associated progressively in management and enterprises in the public sector should set an example in this respect, the Oil & Natural Gas Commission might set up a workers council.

In a highly scientific organisation only expert advice can be considered as far as exploration policies are concerned. Regarding the management of particular sites or locations the Commission is attempting to establish standards of output etc. and it will be some time before workers can be profitably associated with such decisions.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O. M. No. 12/8/58-ONG, dated 29-10-1958*].

The Committee are of the opinion that there would be no difficulty of workers are associated progressively in management of Oil & Natural Gas Commission as the Commission is not dealing only with explorations they therefore reiterate their earlier recommendations that skilled workers should be associated with the management of the Commission.

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It is seen that during the first two years of the Second Plan

The figures of revised estimates and actual expenditure of the

The Committee regret the delay in making the adjustments

the actual expenditure of the ONGC has considerably fallen short of the budget estimates. The Committee are not satisfied with the reasons given for the variations and the shortfalls in expenditure. They feel that these reveal not only poor budgeting but, what is much more serious, poor planning without reference to the availability of resources, personnel, equipment, etc., on the part of an important organisation like the ONGC. The Committee recommend that these matters should be given topmost attention and every attempt made to improve budgeting as well as to draw up realistic plans.

Oil & Natural Gas Commission during 1957-58 are indicated below:—

(Figures in lakhs of Rs.)

	Revised Estimates	Actual Expenditure
1. Revenue Expenditure	102.34	84.78
2. Capital Expenditure	123.34	112.41
TOTAL	225.68	197.19

The reasons for savings under Capital Expenditure are given below :

(Figures in lakhs of Rs.)

(a) Savings due to non-submission of part bill by "Industrial export",

which resulted in large savings. They suggest that in future steps may be taken to avoid such delays.

Rumania and non-payment thereto within the financial year	4.22
(b) Non-payment of cost of vehicles for which provision was made during 1957-58	1.55
(c) Non-payment of 10% cost of Russian Trucks and Trailers.	0.30
(d) Non-adjustment of debits for vehicles during the current financial year against stores which are already received	1.15
(e) Non-raising of debits by CPWD for construction works against the final estimates submitted by them. (See also Appendix VI)	3.71
TOTAL	10.93

Further information called for *vide* Lok Sabha Secretariat O.M. No. 52Pu-54 dated 5-1-60 was furnished by the

Ministry of Steel, Mines & Fuel in March 1960 *vide* O.M. No. 12-8-58-ONG dated 17-3-60
—See Appendix VI.

See remarks against S. No. 8 in this Chapter.

24 The Committee have pointed out elsewhere that there is scope for further savings in various directions, particularly in the expenditure and staffing of Delhi and Calcutta Branch Offices, the two of which cost over 10% of the total charges of pay of officers and establishment of the ONGC as also in the proposed increase in the Ministry. The Committee recommend that early action to effect these economies so as to secure better use for the morries saved should be taken.

The position regarding the staffing of the Delhi and Calcutta Branch Offices of the O.N.G.C. has been explained in reply to para 22. All efforts to effect maximum economy in expenditure in every sphere are being made.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O. M. No. 12/8/58-ONG dated 20-5-60*].

(Further information called for *vide* Lok Sabha Secretariat O. M. No. 52-PU/58 dated 5-1-60 was furnished by the Ministry in May, 1960 *vide* their O. M. No. 12/8/58-ONG dated 20-5-60.)

See Appendix IV.

56 The Committee consider the recommendation of the Soviet Oil experts that the rate of output of the exploration parties in India should be increased, as of particular importance and recommend the need for a review with reference to position in other countries.

Steps are being taken to increase the output of our exploration parties by removing the causes which hold up the progress. Measures to improve efficiency are also being taken. The output of our parties per day compare well with the output of similar parties in foreign countries. Steps to increase the number of exploration parties will be taken.

It is of course not correct to suggest that it will be 50 to 165 years before drilling can be taken up as these proceed simultaneously, while reconnaissance survey of the entire area will it is hoped be completed before the 4th Five Year Plan. The programme is being based on the basis of the attractiveness of the different areas and if success is achieved on some of the earlier localities the balance can be self-financing. Otherwise the whole programme will have to be financed out of

taxation etc. which will constitute a heavy burden.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O. M. No. 12/8/58-ONG dated 23-12-1958*].

Further information called for *vide* Lok Sabha Secretariat O. M. 52-PU/58 dated 5-1-60 was furnished by the Ministry of Steel, Mines & Fuel in March, 1960 *vide* O. M. No. 12/8/58-ONG dated 17-3-60. —See Appendix VII.

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The agreement with the AOC in regard to the formation of Oil India Ltd. contains certain features which do not seem to be very satisfactory. The Committee hope that an energetic officer with suitable qualifications would be appointed at an early date as the Special Director on the Board to take proper care of the country's interests.

“It is difficult to answer the remarks about certain features of the Agreement not being very satisfactory unless they are specifically stated. By and large it can be stated that in the light of protracted negotiations with BOC/AOC, the agreement concluded shows that the Government have succeeded in securing the best possible terms. The Committee's recommendation re-

The reference in para 80 to ‘certain undesirable features’ was to what is stated in the preceding paragraphs (78 & 79). The Committee further recommend that the Oil India Refinery and Oil & Natural Gas Commission should co-ordinate their activities well in advance so that there is no duplication or overlapping in distribution etc. of Oil.

garding the appointment of the Special Director is noted.”

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O. M. No. 12/8/58-ONG dated 30-7-1958*].

84 The Committee recommend that the pattern of present imports should be continuously reviewed so as to make advance arrangements for their production in the existing refineries as well as those to be set up. They further recommend that Government should encourage research into the production methods to see to what extent the present pattern could be altered or the existing surpluses could be processed into other products, particularly in view of the surplus in the production of motor spirit. In this connection it might be mentioned that the agreements for setting up the refinery also provide for discussion regarding the practicability of increasing the output of kerosene.

57 The Committee are not convinced that so far any definite steps have been taken to augment the production of diesel and kerosene particularly the latter from the existing refineries by changing the quality of imported basic crude oil. It is necessary that due regard and caution should be exercised while sanctioning the imports of such crude oil which may yield the best possible results under the circumstances.

The refineries now operating in the country have been established to produce various refined products in accordance with a specific pattern of production depending upon the type of crude oil used. The type of crude oil processed is an important factor in which decides the proportion in which the various petroleum products could be manufactured out of it. Moreover, there is a limit upto which particular products could be produced from a particular type of crude oil and it is not technically possible to produce unlimited quantities of a particular product than of others in any refinery. Subject to these limitations, the refinery companies are producing kerosene to the maximum extent possible. Wherever it is possible,

every effort is being made to step up the production of deficit products and the pattern of present imports is also being reviewed accordingly.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O. M. No. 12/8/58-ONG dated 30-7-58*]

Further information called for *vide* Lok Sabha Secretariat O. M. 52-PU/58 dated 5-1-60 was furnished by the Ministry of Steel, Mines & Fuel in April 1960 *vide* O.M. No. 12-8-58/ONG dated 16-4-60—*See Appendix VIII.*

41 The Committee understand that not much action has yet been taken on the report of M. A. Giraud, Technical Director of the French Institute of Petroleum, regarding the utilisation

85 The report of Mr. Giraud on the utilisation of the refinery gases and the possibility of obtaining raw materials like manufacture of carbon-black, solvents plasticisers, waxes, etc., The Fuel Research Institute might be able to suggest some cheap alternative fuel in order to utilise the gases for the manufacture of bye-products. The Committee suggest that

of bye-products etc., of the refineries and suggest that this be done expeditiously.

the service of the Fuel Research Institute may be obtained and the matter reconsidered before the refineries are set up in the Public Sector.

was studied and it might be stated that action has already been initiated on some of the features included in the report.

The study of the production pattern of the refineries was undertaken. It is observed that the gas element which may be one of the essential constituents for the manufacture of bye-products actually forms only a very small percentage of the crude-charged of the order of 2 to 4 %. The quantity of gas which is being burnt, though an insignificant portion of this, is to a certain extent indispensable, for it is the gas flare that actually indicates whether the refinery operations are running smoothly and at the optimum temperatures and conditions required. After allowing for this minimum quantity of gas which has to be let off as flare for the aforesaid reasons, the supply of quantities of gas, if any, available are utilised as fuel in the refineries and if these are to

be diverted for other uses, the refineries may have to use costlier products like furnace oil for heating purposes. Moreover, the quantity of gas that is now available is so insignificant that this does not even come up to the minimum feed stock that may be required for manufacture of Petro-chemicals, synthetic rubber etc., economically.

The other bye-products *e.g.* oil in sludge, torch oil, burner fuel oil etc., on the basis of the present pattern of production are available only in very small percentages and hence cannot possibly be utilised as a raw material for any manufacturing purposes. Caustic Soda is a waste product in the refinery operations but the extent of contamination with sulphides, mercaptans, phenolates etc., are such that its recovery is not a profitable

enterprise. This explains the present position.

However, the recommendation of the Committee is being noted and the position will be examined further.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O. M. No. 12/8/58-ONG dated 29-10-1958.*]

42 86 The Committee would suggest that there should be advance planning in respect of the utilisation of the gases which would be available during the production of refining of Nahorkatiya crude in consultation with the Development Wing of the Ministry of Commerce and Industry.

Noted. The Ministry have already appointed a firm of Italian Consultants to prepare a Project Report on the utilisation of natural gas, which has just been received and is being examined. Further action will depend upon the examination of the recommendations made in the Report.

The Committee suggest that the service of the Fuel Research Institute may be utilised in such matters.

[*Ministry of Steel, Mines and Fuel (Department of Mines and Fuel) O. M. No. 12/8/58-ONG, dated 30-7-1958.*]

43 87 The Committee feel that it would be better to appoint by mutual agreement a body like

As a result of several discussions with the oil companies and the references made in this

The Committee do not approve of *ad hoc* concessions and reductions in prices. They feel

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that it is always safe to determine prices on a rational basis. The Committee hope that in future instead of coming to an agreement on *ad hoc* basis steps will be taken to determine the price on some rational basis.

the Tariff Commission or a team under the aegis of an international body to examine the problem relating to oil pricing with particular reference to the cost structure. They also suggest that the petroleum laws of the country might make some provision in regard to the prices of petroleum products in the country.

connection by the Minister (Mines & Oil) in the Lok Sabha during the last Budget Session, an agreement has been reached with M/s. Burmah-Shell Limited on 24-5-58 which the other oil companies have also agreed to follow, and the prices of petroleum products have been reduced on an *ad hoc* basis as from 20-5-58 the following reduction has been made by the oil companies in their basic selling prices :

	Rs.
Motor Spirit	0·14 per gallon
Kerosene Sup.	0·48 per unit.
Kerosene Inf.	0·48 per unit.
H.S.D.	0·07 per gallon
L.D.O.	11·64 per ton

F.O.	• • •	13.91 per ton
A.T.F	• • •	0.01 per gallon
V.O.	• • •	0.03 per gallon
Aviation Gasoline	• • •	0.15 per gallon

2. The impact of these reductions on Messrs. Burmah-Shell sales estimates for the year 1958 comes to approximately Rs. 49.5 lakhs per month and on all oil companies sales estimates to about Rs. 10 crores per year.

3. Messrs. Burmah-Shell Limited agreed to terminate the Valued Stock Account Agreement, in operation since 1-4-50, as from 20-5-58 and to write off the net deficit balance in this account as on that date amounting to approximately Rs. 1.5 crores.

4. It has also been agreed that the oil companies will provide all necessary facilities and information to the Government Cost Accountant to

examine their accounts sufficiently in regard to the quantum and propriety of all charges (from f.o.b. point through c.i.f. to the selling points) included by the oil companies in the selling price of each product. This examination is intended to enable a new price formula being evolved, if possible, by the end of the current year to cover all products marketed in, and from, in this country by the oil companies. The new formula will have retrospective effect from 1-4-58 and if it is found that the prices thus determined are different from prices actually charged from 1-4-58 onwards, retrospective adjustments will also be made with effect from 1-4-58. Such retrospective adjustments will be made either by relating them to the future prices or in such other manner as may in due course be agreed upon.

5. The prices, arrived at after making the above *ad hoc* reductions as from 20-5-58 shall continue to be in force until the new price formula is introduced subject only to the movement in the c.i.f. elements apart from the reasons outside the control of the companies (such as changes in the duties and taxes.)

6. The Chief Cost Accounts Officer of the Ministry of Finance and his team have already started the work in respect of the examination of the oil companies accounts. The new formula will be settled after the Chief Cost Accounts Officer has determined the cost structure of petroleum products.

7. In view of these arrangements enquiry by Tariff Commission or international experts is not necessary and further, no separate provision need be made in petroleum legislation for control of prices as necessary powers already exist

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under the Essential Commodities Act.

Ministry of Steel, Mines and Fuel
(*Department of Mines and Fuel*)
O.M. No. 12/8/58-ONG dated
29-10-1958].

Further information called for *vide*
Lok Sabha Secretariat O.M.
No. 52-Pu/58 dated 5-1-60
was furnished by the Ministry
of Steel, Mines & Fuel in
March, 1960 *vide* O.M. No.
12/8/58-ONG dated 17-3-60
—See Appendix IX.

The Committee stress that the short-term plan for the production of soft-coke be included in the Third Plan. Its consideration should be expedited and its importance kept in view.

The question of production of synthetic oil from coal has been under consideration of Government for some time. An expert committee set up under the chairmanship of Dr. J. C. Ghosh recommended a soft-coke-*cum*-synthetic oil projects, involving a capital cost of Rs. 20 crores, for low temperature carbonisation of

The Committee recommend that the question of manufacture of synthetic oil be examined early taking into account the overall position regarding the availability of oil as well as the production and refining capacity in the country.

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1.2 million tons of non-coking coal for the production of about 0.8 million tons of soft coke and the consequential utilisation of bye-product tar for production of 121,500 tons of motor fuel, 2,000 tons of phenol and 40,000 tons of road tar. The project was considered not only economical but actually profitable. However, in the context of Government's intention to set up a large oil refinery for the production of petroleum products, based on indigenous crude oil from Assam, it was felt that the proposal for the production of synthetic oil would need further scrutiny.

2. In January, 1957 the Ghosh Committee went into this question very thoroughly again, and drew up a long term and a short-term scheme for the production of domestic (or soft) coke. The former envisaged the production of 50 million tons per annum by low temperature carbonisation together with production of bye-product petrol,

phenols, road tar etc. at a total capital cost of Rs. 600 crores. In the short-term plan, production of about .8 million tons of domestic coke had been recommended with the consequential utilisation of bye-products, at a total cost of Rs. 20 crores approximately (or roughly Rs. 18.44 crores). It may be pointed out that the Committee on Requirements and Utilisation of Coal also recommended that Government make a beginning with at least 5 plants for low temperature carbonisation with initial Capacities of 1500 to 3000 tons of coal per day in the States of Andhra, Bengal, Bihar, Bombay and Madras during the Third Five Year Plan. It was quite clear that the implementation of long term plan as recommended by the Ghosh Committee would necessitate a number of preliminary

but essential and time-consuming steps, and this must wait an improvement in the resources position, both internal as well as external. The short-term plan was, however, recommended to the Planning Commission for immediate implementation and they commented, *inter alia*, as follows :

“***in view of the difficult foreign exchange position and the difficulty of finding the rupee resources it will not be possible for the Planning Commission to recommend this scheme for inclusion in the Plan and allocate provision therefor.”

3. The question of moving the Planning Commission to include the short term plan for the production of soft-coke in the Third Plan period is under consideration. Whether this is feasible or not will depend on the question of financial resources which the Planning Commission can allocate for this purpose.

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Various aspects of this problem have been gone into in great detail by several expert committees, the last being the Committee on Requirements and Utilisation of Coal, and it is not considered necessary to review the over-all position regarding the availability of oil as well as the production and refining capacity in the country again at this stage.

[*Ministry of Steel, Mines and Fuel*
(*Department of Mines and Fuel*)
O.M. No. 12/8/58-ONG, dated
29-10-1958].

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(i) The Committee hope that the proposed school for technical training would be established in close liaison with the existing training courses already available in the Oil Refineries in the Private Sector.

(i) The matter is being considered and appropriate proposals will be formulated in due course.

The Committee are concerned to note that it should have taken the Government more than one and a half years in merely considering the proposals. They recommend that the matter may be expedited.

(ii) They also suggest that the training facilities provided by the Institute Français Du Petrol, Paris (IFP) with particular reference to the recommendations made by Mr. A. Giraud, Technical Director of the Institute and other similar institutions abroad as well as under the various aid schemes should be fully availed of in this matter.

(ii) Some progress has already been made and twelve officers have already been deputed for training in the French Institute of Petroleum, in various aspects such as geological interpretation, photogeology, reservoir engineering, drilling and oil refining. Two Geologists and one Geophysicist have been deputed to Holland for training in Photogeology and interpretation of seismic data with the Royal Dutch Shell Group Companies, 6 Geophysicists have been deputed to USSR for training in various aspects of Geophysical prospecting under UNTAA Fellowships and three Geologists are likely to leave shortly for training in Oil Field practices under the T.C.M. scheme.

(iii) An indication of the requirements of petroleum technicians over a period of five years may also be given to the Ministry of Education and Scientific Research so that the latter may ensure that an appropriate number took up

(iii) Steps have been taken to assess the broad requirements of petroleum technicians over a period of five years, and the information will be forwarded to the Ministry of Scientific Research and Cultural Affairs.

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the subject of petroleum engineering, including refining and applied geophysics in important overseas institutions.

[Ministry of Steel Mines and Fuel
(Department of Mines and Fuel)
O.M. No. 12/8/58-ONG. dated
29-10-1958].

NEW DELHI;
December 20, 1960
Agrahayana 29, 1882 (Saka)

H. C. DASAPPA,
Chairman,
Estimates Committee.

APPENDIX I

(Vide S. No 18—Chapter III)

Statement 'A': Comparison of Operational Costs

The overall monthly expenditure of an ONG Commission Seismic Party is Rs.72,575 including overheads *i.e.* administrative charges at headquarters, branch offices and the depreciation and interest on the capital outlay. This is considerably lower than the operational costs of a Canadian Seismic Party at Rs. 1,28,000 per month. Similarly the overall monthly costs of ONG Commission Gravity-cum-Magnetic Party also stand much lower at Rs.18,200 as compared to Rs. 31,000 for the Canadian Party. The details of the overhead and other charges for the costs of the Canadian parties are not available.

A detailed comparative study of the operational costs of ONG Commission and Indo-Stanvac is presented below, along the line suggested by the Estimates Committee :

Items	Seismic Party		Gravity-cum-Magnetic Party	
	Indo-Stanvac	ONGC	Indo-Stanvac	ONGC
	Rs.	Rs.	Rs.	Rs.
Personnel	1,03,250	20,375	**	11,45
*Operational Costs	2,21,750	52,200		6,750
Total	Rs. 3,25,000	Rs. 72,575	Rs. 80,000	Rs. 18,200
Line miles covered per month	80	26.6	155 (245 stations)	256 (252 stations)
Expenditure per line mile	Rs. 4,060	Rs. 2,730	Rs. 516	Rs. 71

From the above comparative study, it is evident that expenditure incurred by ONG Commission in their Geophysical exploration programme is considerably lower than that of Indo-Stanvac. At present the monthly output of Seismic work by ONG Commission is lower. The reason for this is that Seismic Parties of ONG Commission have been newly organised and there have been some unforeseen delays in procurement of explosives, shortage of vehicles and spares and equipment for stepping up production. Anyway when more equipment becomes available and some more experience is gained, the output of the ONG Commission too will be on a par with Indo-Stanvac operation and a far less cost.

*Operational costs include the cost of explosives, chemicals, compensation, due to damages to crops, depreciation on capital outlay etc.

**The break up for the cost of Indo-Stanvac, G.M. Party is not available-

APPENDIX II

(Vide S. No. 46—Chapter III)

With reference to reply to recommendation (S. No. 46) in para 91 detailed information with regard to the steps taken to reduce delay in recruitment may please be furnished.

Before the conversion of the Oil and Natural Gas Commission into a statutory body the Commission had to forward requisitions for the posts to be filled through the Ministry of Steel, Mines and Fuel to the Union Public Service Commission. The vacancies were advertised by the Union Public Service Commission inviting applications from suitable candidates. After completing all formalities regarding screening of applications, interviewing candidates etc. the Union Public Service Commission used to forward their recommendations to the Ministry and the Ministry in turn used to convey the acceptance of the Government to this Commission.

2. Despite the uncertainties inherent in the Oil Exploration Programme, the Commission has drawn up its man-power requirement for 1959—61 as carefully as possible and posts have been and are being created expeditiously and sufficiently in advance.

3. The Commission, upon conversion into a statutory body from 15-10-1959, has been directly advertising posts and with the help of its own Selection Committees has been able to make recruitment within a couple of months thus reducing delays considerably.

APPENDIX III

(Vide S. No. 47).

Points raised by Lok Sabha Secretariat

The detailed information with regard to the course of study prescribed, the examination held by the U. P. S. C., arrangement made for further theoretical training through seminars, the five year project for training abroad may be furnished with reference to reply to recommendation (S. No. 47) contained in para 92 of the Report.

Reply

I. Course of study prescribed included the following:

1. Apprentice Geophysicists:

Theory

- (i) General principles of Geophysical prospecting and various methods used in Oil exploration;
- (ii) Detailed study of Magnetic, Gravitational and Seismic methods of prospecting for oil and geophysical well logging techniques in oil well;
- (iii) An elementary course in Geology including knowledge of classification and identification of rock, structural geology and outlines of the Stratigraphy of India;
- (iv) Basic ideas of petroleum Geology with special reference to India, Pakistan and Burma.

Practicals:

- (i) Use and care of geophysical instruments;
- (ii) Computation of Geophysical data;
- (iii) Preparation of maps and profiles of anomalies and their subsequent interpretation;
- (iv) Field work in all different phases of seismic prospecting viz., surveying, drilling, jug-hustling, shooting and recording.

2. Apprentice Geologists:

Theory

- (i) Principles of sedimentation and general stratigraphy;
- (ii) Stratigraphy of India with special reference to Mesozoic and Tertiary formations;

- (iii) Paleogeography of India since the Palaeozoic era;
- (iv) Study of various types of faults, folds, joints and other primary geological features;
- (v) Determination of top of beds by primary geological features and by drag folds;
- (vi) Tectonic framework of Asia with special reference to India's position within it;
- (vii) General principles of Petroleum Geology with special reference to Oil provinces in India;
- (viii) Field survey methods, geological mapping and cross sections;
- (ix) Photogeology and field mapping. Study and interpretation of aerial-photographs; and
- (x) Elementary Geophysics.

Practical

Construction of geological cross sections by various methods and interpretation of aerial photographs and preparation of reports thereon.

II. Examinations held by the U.P.S.C.

1. *Apprentice Geophysicists*

The examination conducted by the U.P.S.C. consisted of three written papers, a practical and an oral test.

Paper I (100 marks) covered (a) general principles and different methods of geophysical prospecting, (b) theory of surface and air-borne magnetometers, their application, operation, interpretation of magnetic anomalies, their usefulness and limitations (c) theory and principles of gravity meters (especially worden gravimeter), operation, interpretation of gravity anomalies, their usefulness and limitations.

Paper II (100 marks) covered (a) principles of Reflection and Refraction seismic surveys, instruments used and their construction, operation principles, organisation of Seismic parties, computation of records and interpretation procedures (b) Geophysical well-logging techniques (c) Basic Geology; Classification rocks, structural geology and petroleum geology.

Paper III (100 marks) covered the care, handling and operation of geophysical instruments, preparation of anomaly profiles and maps and basic interpretation.

The Practical and Oral Tests (50 marks) were held in which the capacity of the Apprentice Geophysicists to operate the geophysical instruments was judged. A test for the identification of Geological specimens was also held.

2. *Apprentice Geologists*

The examination held by the U.P.S.C. consisted of two papers on theory, one on practical test and one *viva voce* test.

Interpretation of various types of geological maps, cross sections, isopachs, lithofacies and biofacies, photogeology and field mapping, use of aerial photographs, interpretation of physiographic and geological features, drainage and texture pattern, uses of different types of stereoscopes.

Theory Paper II (100 marks) covered (a) Principles of sedimentation and general stratigraphy; stratigraphy of India with particular reference to Mesozoic and Tertiary formations. Paleogeography of post Paleozoic era. Nomenclature and recognition of folds; unconformities and joints, faults, calculation of net slips, criteria for recognition of faults (b) Tectonic framework of Asia and India's position within it (c) Geophysics, elementary principles involved in gravity, magnetic and seismic prospecting, presentation and interpretation of field data.

Practical Paper III (80 marks) covered Construction of geological cross section, interpretation of aerial photographs and preparation of report on the study of aerial photographs.

Viva Voce Test (20 marks) covered Operation of field geological equipment and work on aerial photographs.

III. *Arrangement made for further training through seminars*

Immediately after the examination the apprentice geophysicists were attached to different field parties of the O.N.G.C. and G.S.I. for further training. Discussions and seminars were held to examine certain geophysical problems wherever possible. Foreign experts guiding them individually gave lectures to increase their theoretical and practical knowledge. As regards, Geologists, one seminar on Ganga Valley was held in which many of the field officers participated. A symposium on Rajasthan is likely to come up. More seminars would be held as and when necessary and when geological work in a particular area warrants. In addition geological conferences are held every year at the headquarters when officers return from the field and during such conference field officers give accounts of their field work in different areas and such accounts are thoroughly discussed by them as well as senior officers and foreign experts. Thus there is scope for thorough assimilation of various geological data, exchange of ideas and geological knowledge.

IV. *Project for training*

A scheme has been drawn up by the ONGC under which approximately 8 to 12 officers are to be sent every year to different countries such as USA, Russia, Canada, France, Germany and Rumania for

periods varying from 6 to 12 months under the various schemes viz. TCM, UNTAA, Colombo Plan and the Indo-French Agreements. Efforts are being made to send some of the officers at Commission's expense as well. Already 11 Geophysicists have successfully completed their training abroad and returned. Seven are at present on deputation while two are to proceed immediately and 13 are to proceed within the next six months. During 1960—64 twelve officers each year will be sponsored; two to USA (TCM), six to continental countries (UNTAA), two to Canada (Colombo Plan) and two to France (Indo-French Agreement). It is proposed to send 17 officers abroad for higher geological training every year for different subjects as indicated below during the Third Five Year Plan.

(a) Sub-surface Geological techniques and well site geology	5
(b) Palaeontology	2
(c) Palynology	1
(d) Photogeology	1
(e) Sedimentary Petrography	2
(f) Mud Chemistry	2
(g) Reservoir Engineering	1
(h) Structural Mapping and petroleum geology	3
	<hr/>

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The programme of training is flexible and depends upon the exigencies of the Commission's work.

It is proposed to train all the officers by the end of the Third Five Year Plan.

APPENDIX IV

(Vide S. No. 8—Chapter IV)

Points raised by Lok Sabha Secretariat

Particulars of expenditure incurred on the Branch Offices for the last three years may please be furnished with reference to recommendations at S. No. 8 (para 22) and S. No. 24 (para 48).

Reply

A statement showing the particulars of expenditure incurred on Delhi, Calcutta and Bombay Branch Offices of the Commission is forwarded herewith.

It may be added that expenditure during 1956-57 at Calcutta Office appears to be high because the Headquarters of the Commission were located at Calcutta upto 14-8-1956.

Statement of Administrative Expenditure of the Branch Offices for the past three financial years

	1956-57	1957-58	1958-59
DELHI OFFICE			
Total :	18,481·23	1,18,723·03	2,49,471·75
*CALCUTTA OFFICE			
Total:	8,17,845·00	2,47,390·42	1,86,357·38
**BOMBAY OFFICE			
Total:	—	4,581·93	39,795·35

*Calcutta was headquarters of the Commission upto 14-8-1956.

**Bombay Office was set up on 28-5-1957.

APPENDIX IV-A

(Vide S. No. 8—Chapter IV)

Name of place
of Branch Office
of O.N.G. Com-
mission

Functions

-
- | | |
|-----------------|--|
| BOMBAY | <ul style="list-style-type: none">(i) Transportation of equipment imported from abroad.(ii) Purchase of material from local market and prompt supply of stores to various projects.(iii) Recruitment of staff for Cambay office.(iv) To act as drawing and disbursing office for supplies made ex-Bombay office. |
| CALCUTTA | <ul style="list-style-type: none">(i) To look after the receipt of stores from abroad.(ii) Local Purchase of Engineering, technical and chemical stores.(iii) To look after trainees with S.V.O.C.(iv) Copying of Maps from Geological Survey of India.(v) To maintain liaison between Geological Survey of India, S.V.O.C. and the Commission.(vi) To attend to seismic exploration work in Assam.(vii) To attend to Deep Drillig Project, Assam.(viii) To contact D.G.S. & D., Chief Controller of Exports and Imports and Customs etc. regarding imports of equipment from outside.(ix) To keep contact with D.G.S. & D Forms Store^s for quick procurement of stationery and forms indented by the Commission.(x) To maintain accounts of seismic operation and deep Drilling operation in Assam.(xi) To arrange despatch of explosives by M/s I.C.I. as per schedule of the Geophysical Directorate for exploration work for different Geophysical field parties. |

(xii) To chase equipment and other articles transported for different places as per programme of the Commission.

DELHI . . . To make personal contacts with organisations like D.G.S.&D., Railway Board, C.P.W.D., U.P.S.C., the Ministries and the various offices of the Foreign Embassies as also with reputed firms in oil business to expedite matters.

<p>JAWALAMUKHI HOSHIARPUR CAMBAY SIBSAGAR BARODA</p>	}	<p>These Branch Offices are necessary for carrying out drilling operations in the respective areas.</p>
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APPENDIX V

(Vide S. No. 10—Chapter IV)

Points raised by the Lok Sabha Secretariat

It is stated in the reply of Government to recommendations (S. No. 10) contained in 25th para of the report that the Oil and Natural Gas Commission will *inter alia* set up if necessary associated industries for utilisation of petroleum and refinery gases produced in the refining of petroleum produced by it. On the other hand, it has been stated in reply to S. No. 6 that no industry which uses any of the refinery gases produced by the Commission shall be set up by it. The Government is requested to clarify the position.

It is also stated in reply of Government that the work relating *inter alia* to pricing and distribution of petroleum production will be the responsibility of the Ministry. The nature of the work involved in this respect may please be clarified.

Reply

The functions assigned to the Oil and Natural Gas Commission have been enumerated in Section 14 of the Oil and Natural Gas Commission Act, 1959. These include, *inter alia*, the transport and disposal of natural gas and refinery gases produced by the Commission provided that no industry which will use any of these gases as a raw material, shall be set up by the Commission without the previous approval of the Central Government. The reply given earlier regarding recommendation contained in Para 25, may now be modified accordingly.

The nature of work done in the Ministry relating to pricing and distribution of petroleum products is indicated below:

Pricing of Petroleum Products

Till May, 1958, the prices of bulk petroleum products were fixed from time to time in terms of the Valued Stock Amount procedure agreed to by Government with M/s. Burmah-Shell Oil Storage & Distributing Co., of India Ltd., with effect from 1.4.50. Though this Agreement was only between M/s. Burmah-Shell and the D. G. S. & D. and that too in respect of Government purchases only, the Company allowed certain extra concessions in respect of bulk purchases by/for Government Departments. The other Oil Companies were not direct parties to the agreement, but they also generally charged the same prices as that of Burmah-Shell. In support of the prices charged for the bulk petroleum products covered by this procedure, a detailed account was submitted to the D. G. S. & D., at the end of

each year, by Burmah-Shell duly authenticated by their General Manager and approval obtained.

With a view to effect reduction in the prices of P. O. L. products, consistent with the prices obtaining in other countries, after protracted negotiation between Government and the Oil Companies, an *ad hoc* agreement was reached in May, 1958, as a result of which (a) the old V. S. A. procedure was dispensed with and (b) the Oil Companies agreed to an *ad hoc* reduction of about Rs. 10 crores (approximately) per annum in the ceiling selling prices of petroleum products (with effect from 20.5.58); the reductions, being subject to C.I.F. movements only, were to remain in force till a new price formula was evolved, and (c) the Oil Companies agreed to an examination of their accounts by the Chief Cost Accounts Officer of Government with a view to evolve a new price formula for all petroleum products marketed in or from this country. Those *ad hoc* reductions were mopped up by Government through levy of additional excise/import duties, non-recoverable from the consumers, under the Mineral Oils (Additional Duties of Excise/Customs) Act, 1958.

In pursuance of that agreement, after examination of the accounts of the Oil Companies, the Chief Cost Accounts Officer submitted his Report on the evolution of a new price formula on petroleum products. After detailed discussions on the various individual price proposals, copies of the Report were made available to the Companies and, finally, the Companies submitted a joint proposal. Further discussion on that only confirmed that no agreement could still be reached in regard to the basic principles governing the price formula. At this stage, without yielding the respective stands of the two parties on the basic principles, a pragmatic approach was tried to arrive at a settlement on the basis of figures and an *ad hoc* agreement was reached with the Oil Companies on 23.10.59, which will be effective up to 31.3.61.

Further details of the *ad hoc* agreement whereby additional reductions in the basic prices of the major refined products amounting to Rs. 5 crores per annum (in addition to the *ad hoc* reductions agreed to in May, 1958 of about Rs. 10 crores per annum) have been explained in full while reporting the progress in regard to para 87 of the Report.

Distribution: The Oil marketing Companies in the country (which are in the private sector) are free to market their products and Government do not generally interfere with their operations.

In order to advise Government and assist the Ministry of Railways in matters regarding allocation of Railway tank wagons, at the instance of this Ministry and in consultation with the Ministry of Railways, the Railway and Inland Petroleum Movements Committee was formed with representatives of the major oil companies. The Western India

Oil Distributing Company has also since been associated with this Committee. Shortages in the supply of petroleum products at any place due to non-availability of tank wagons is brought to the notice of the Ministry of Railways. This Ministry, along with the Ministry of Railways, have been responsible for rendering necessary assistance in the matter from time to time.

All questions of actual or apprehended shortage in supplies at specific places are immediately taken up with the Oil Companies for adequate replenishment of stocks.

Moreover, in order to meet emergencies as and when distribution facilities are affected, powers under the Essential Commodities Act have been delegated to the State Governments, as and when asked for, to ensure equitable distribution of supplies at reasonable rates.

Establishment of a Government Distribution Organisation

A wholly Government-owned distributing Company (*viz.*, Indian Oil Company Ltd.) has been registered on 30-6-59 with an authorised capital of Rs. 12 crores. This company will market the petroleum products produced by the public sector refineries and will also undertake the distribution of imported products.

In addition, an expert Government Industry Committee has also been set up recently to advise on matters of common problems relating to the consumption, *distribution* and the supply aspects of the petroleum products in the country with due regard to the production of the two public sector refineries.

Imports: Imports of P. O. L. products, are also controlled by this Ministry. Taking into consideration indigenous production, foreign exchange allocations for imports of Crude Oil and bulk petroleum products are made, from time to time.

APPENDIX VI

(Vide S. No. 20—Chapter IV)

Point raised by the Lok Sabha Secretariat

In reply to recommendation (S.No. 20) in para 43 of the Report, no reasons have been given for variation in the Revenue Expenditure. The reasons may please be furnished.

Reply

The figures of revised estimates and actual expenditure under Revenue (as finally intimated by Audit) during 1957-58 are indicated below:—

	Revised Estimates	Actual Expenditure (as finally intimated by Audit)
Revenue Expenditure	Rs. 102.34 lakhs	Rs. 92.24 lakhs.
2. The reasons for saving under Revenue expenditure are given below:		
(Figures in lakhs of Rs.)		
(a) Savings due to non-drawal of pay within the financial year by officers of the ONGC who were either not in receipt of pay slips or were in field areas and at places other than the Headquarters for the period from December, 1957 to February, 1958		0.18
(b) Savings due to non-drawal of DA and TA by some of the officers within the financial year		0.05
(c) (i) Non-adjustment of debits of stores and equipment procured through D G S & D	1.50	} 10.08
(ii) Non-adjustment of Railway Credit notes in U.P. Circle	0.64	
(iii) Non-adjustment of customs duty bills	7.56	
(iv) Non-submission of a bill by "Techno-export" towards the salary of the foreign experts for the month of February, 1958	0.38	
Less excess adjustment in A.G., West Bengal Circle towards costs of Stores and Equipment through D G S & D.		0.21
	Total (c)	9.87
	Total (a), (b) & (c) :	10.10

APPENDIX VII

(Vide S. No. 25 Chapter IV)

Point raised by the Lok Sabha Secretariat

With reference to reply given to recommendation (S. No. 25) in para 56 of the report, the exact number of the exploration parties, their achievements and the rate of output of each party may please be stated.

Reply

A statement showing the required information is attached.

*Achievements of Oil & Natural Gas Commission
(During 1957-59)*

Type of Work	1957-58		1958-59			
	No. of parties	Volume of work	Average/ party per day	No. of parties	Volume of work	Average/ party per day
1. Geological mapping (sq. mile)	16	4129	1.1	18	2941	1.0
2. Seismic Survey (Line miles)	6	844	1.2	7	1529	1.4
3. Gravity-Magnetic Surveys (Square-miles)	8	13160	10.6	10	15474	12.2
4. *Deep Test drilling (Ft.)		6356		..	49314	
5. *Structural Drilling (Ft.)					19699	..
6. *Shallow drilling (Ft.)					8668	..

*The drilling data is upto 31-12-59.

NOTE : (1) 20 Geological, 8 Seismic and 9 G. M. Parties have already been sent to the field for the field season 1959-60.

(2) Geological mapping comprises of Regional and detailed surveys.

APPENDIX VIII

(Vide S. No. 40—Chapter IV)

To what extent the pattern of production in the existing refineries have been modified to enable production of such oil as are in great demand.

Until 1954, there was only one refinery in the country *i.e.*, Assam Oil Refinery, Digboi. Since then, the Standard-Vacuum, Burmah-Shell and Caltex refineries were constructed and are regularly in operation. During the past four years, all the refineries have been consistently endeavouring to alter the pattern of production for which the refineries were designed in order to match the consumption trends within the country. Simultaneously, the refineries located in the port towns have also been able to increase their crude throughput beyond what is stipulated in their relevant agreements. The product yields resulting from each refinery vary according to the design of the units installed and also on account of the crude oil processed by each of them. However, the results achieved during 1959 by all these refineries as well as the Digboi refinery show that the output of Diesel Oils was increased by about 3 to 6% over the 1958 production or approximately represented an increase to the extent of about 12% over the yields estimated in the relevant agreements. This yield of Kerosene from these refineries did not show a substantial increase but at least one refinery was able to increase its output by about 20% mainly on account of the increased crude throughput. All the Oil Companies operating in India are alive to the question of altering the pattern of yield consistent with the demands within the country and are continuing their efforts to increase the output of Kerosene and Diesel Oils in particular for which the demands have also correspondingly increased.

(ii) *To what extent the pattern of imports has been modified to enable modification in the pattern of production.*

It appears that the question should really be whether imports of products in deficit supply are arranged taking into account the product yields resulting from the existing refineries. It will be noted that the largest deficit is in respect of Kerosene and Diesel Oils and, therefore, it may not be possible unilaterally to modify imports of these two items to enable modification of the pattern of production within the country. However, in arranging the imports of deficit products, due regard is always given to the estimated yields available from the existing refineries thereby ensuring that the total production within the country plus the imports from abroad actually meet as far as possible the entire demands within the country for all petroleum products.

In fact, over the past two years, the order of imports has not shown substantial increase in as much as the refineries in India were also able to increase their crude throughput and thereby yield greater quantities of petroleum products.

(iii) *What steps have been taken to produce lubricating oil and petroleum coke in the country?*

The Assam Oil Company, Digboi, are already producing about 20,000 tons of lubricating oils and about 10,000 tons of petroleum coke per year. In addition, the Nunmati (Gauhati) refinery to be established by Government in the public sector would, when in operation, produce about 39,000 tons of petroleum coke per year. Subject to technical feasibility, it is also proposed to undertake production of lubricating oils at the refinery to be established at Barauni in Bihar. Simultaneously, a proposal to establish a separate Lubricating Oil Plant in the public sector is also under examination.

(iv) *Whether any research is conducted to see that the pattern of production is the best suited to the needs of the country.*

At present, all the necessary research is conducted by the Oil Companies themselves through their affiliated or subsidiary companies. To some extent, research is also conducted by the Central Fuel Research Institute, Jealgora. It is, however, proposed to establish an institute of Petroleum Technology and when this commences functioning, such research activities as are essential would be undertaken by this Institute.

Besides the information requested for in item No. 5 above, information about the research conducted in various matters including pattern of production may please be furnished with reference to reply given to recommendation (S. No. 40) contained in para 84 of the Report.

A list of problems on which work is being done in the Central Fuel Research Jealgora, Dhanbad is attached. The subjects of research include analysis of newly discovered crude oils and natural gas, hydrogenation of heavy petroleum fractions like furnace oil to obtain middle distillates, hydrogenation of LTC tar to obtain diesel fuels, cracking of wax to obtain middle distillates.

Apart from Central Fuel Research Institute, some other laboratories are also working on some specific problems. For example, the Regional Research Laboratory, Hyderabad is developing suitable clays used in lubricating oil refining. The National Physical Laboratory is studying the oxidation of transformer oil during service. The National Chemical Laboratory is engaged in work on some petrochemicals.

List of problems on which work is being done in the Central Fuel Research Jealgora, Dhanbad.

LIST 'C'

1. Physical and chemical properties of crudes and fractions therefrom.
2. Structural analysis.
3. Spectroscopic studies—ultraviolet and infrared and mass spectrometer.
4. X-ray studies of catalysts.
5. Gas analysis.
6. Vapour phase and partition chromatography.
7. Distillation Solvenet and index extraction.
8. Development of new technique for analysis and testing.
9. Surface properties of catalysts.
10. Catalytic creacking of petroleum fractions and wax.
11. Catalytic hydrogenation (Low and high pressure).
12. Platforming of petroleum fractions.
13. Fluidised coking of petroleum fractions.
14. Catalytic oxidation of hydrocarbons.
15. Hydro-refining of crude (catalytically).
16. Production of lubricants from wax.
17. Production of diesel oil from furnace oil.
18. Oxo-Synthesis.
19. Synthesis of hydrocarbons and alcohols and chemicals from synthesis gas.
20. Production of carbon black.
21. Production of phenol from Benzene by chlorination and via cumene.

APPENDIX IX

(Vide S. No. 43—Chapter IV)

With reference to Serial No. 43 contained in para 87 progress made upto date may be stated.

S. No. 43—Para 87 of the Report

As agreed with the Oil Distributing Companies in May, 1958, the Chief Cost Accounts Officer of the Government examined their accounts and submitted his report on the evolution of a new price formula for petroleum products. Copies of this Report have been placed in the Parliament Library on 20-8-1959.

2. After considering his Report and recommendations contained therein, discussions were started by Government with the Oil Companies, copies of the Report were also later made available to the Companies. Thereafter, the three major Oil Companies filed a joint proposal. Further discussions on it only confirmed that there was no possibility of an agreement between the two sides on some major questions of principle, which had been discussed over and over again. So it was suggested that the Companies might consider whether, without either side yielding on their respective stands regarding principles, the difference in the respective price proposals could be narrowed in terms of figures. On this, the Companies finally offered, on 13-10-59, some further *ad hoc* reductions, which were accepted by the Government on 23-10-59.

3. The broad features of the *ad hoc* agreement thus reached are:—

- (a) The Oil Companies agreed to waive their claim for the c.i.f. movements of bulk petroleum products, amounting to about Rs. 0.9 crores for 1958-59, which was in their favour.
- (b) This new *ad hoc* agreement is to remain in force till 31-3-61 in any case.
- (c) The Oil Companies agreed to make further *ad hoc* reductions, at the rate of about Rs. 5 crores (approx.) per annum with effect from 1-4-59 to 31-3-61, in the basis ceiling prices of major petroleum products, in addition to the reduction therein at the rate of about Rs. 10 crores agreed to by them in May, 1958.

- (d) In addition to the said *ad hoc* reduction at the total rate of about Rs. 15 crores per annum with effect from 1-11-59, these companies agreed also to a reduction at the rate of about Rs. 4 crores per annum on account of current drop in the landed costs of the products consumed subject, of course, to future upward or downward movements in landed costs through an adjustment account to be maintained.
- (e) All the further *ad hoc* reductions have again been mopped-up by Government by suitable enhancement of additional duties of Excise/Customs under the Mineral Oils (Additional Duties of Excise and Customs) Act, 1958 and under the Mineral Oils (Additional Duties of Excise and Customs) Amendment Act, 1959; the ceiling prices payable by consumers thus remaining unaltered.
- (f) The difference in C & F value for supplies of Bitumen made under the D.G.S. & D. and State Government Contracts shall be refunded to such major consumers direct. Further, future ceiling prices of Bitumen (exclusive of import/excise duty) will also reflect that drop in its C & F value.

4. Since this *ad hoc* agreement reached with the Oil Companies is for the period ending 31-3-61, steps will be taken at the appropriate time to determine what should be the basis for formula for price beyond that date.

5. The *ad hoc* reductions in ceiling prices (mopped-up by the Government through levy of corresponding additional duties) are as follows:

Products	Unit	<i>Ad hoc reductions in prices (mopped up)</i>		
		W.E.F. 20-5-58	W.E.F. 1-4-59	W.E.F. 1-11-59
1. Motor Spirit . . .	IG	0·14	0·14	0·23
2. Aviation Spirit. . .	IG	0·14	0·14	0·23
3. Aviation Turbine Fuel . . .	IG	0·06	0·12	0·12
4. Kerosine Superior . . .	8-IGs	0·48	0·96	0·96
5. Kerosine Inferior . . .	8-IGs	0·48	0·96	0·96
6. High Speed Diesel Oil . . .	IG	0·07	0·12	0·15
7. Vaporising Oil. . . .	IG	0·03	0·05	0·05
8. Light Diesel Oil	Ton	11·64	20·00	20·00
9. Furnace Oil	Ton	13·91	20·00	20·00
10. Total annual impact, as anticipated.		10 Crores (approx.)	15 crores (approx.)	19 crores (approx.)

APPENDIX X

Analysis of the action taken by Government on the recommendations contained in the Twenty-Second Report of the Estimates Committee (Second Lok Sabha).

1. Total number of recommendations	54
2. Recommendations accepted by Government	15½
Percentage of total	28·7
3. Recommendations not accepted by the Government but replies in respect of which have been accepted by the Committee.	23
Percentage of total	42·6
4. Recommendations not accepted by Government (Including those which are still under consideration by Government).	
No.	15½
Percentage of total	28·7

LIST OF AUTHORISED AGENTS FOR THE SALE OF PARLIAMENTARY PUBLICATIONS OF THE LOK SABHA SECRETARIAT, NEW DELHI-1.

Agency No.	Name and address of the Agent	Agency No.	Name and address of the Agent	Agency No.	Name and address of the Agent
1.	Jain Book Agency, Connaught Place, New Delhi.	20.	The English Book Stores, 7-L, Connaught Circus, New Delhi.	37.	Amar Kitab Ghar, Diagonal Road, Jamshedpur-1.
2.	Kitabistan, 17-A, Kamla Nehru Road, Allahabad.	21.	Rama Krishna & Sons, 16-B, Connaught Place, New Delhi.	38.	Allied Traders, Motia Park, Bhopal.
3.	British Book Depot, 84, Hazratganj, Lucknow.	22.	International Book House Private Ltd., 9, Ash Lane, Bombay.	39.	E. M. Gopalkrishna Kone, (Shri Gopal Mahal), North Chitrai Street, Madura.
4.	Imperial Book Depot, 268, Main Street, Poona Camp.	23.	Lakshmi Book Store, 42, M. M. Queensway, New Delhi.	40.	Friends Book House, M. U., Aligarh.
5.	The Popular Book Depot (Regd.), Lamington Road, Bombay-7.	24.	The Kalpana Publishers, Trichinopoly-3.	41.	Modern Book House, 286, Jawahar Ganj, Jabalpur.
6.	H. Venkataramiah & Sons, Vidyavidyalaya Book Depot, New Statue Circle, Mysore.	25.	S. K. Brothers, 15A/65, W. E. A., Karol Bagh, New Delhi-5.	42.	M. C. Sarkar & Sons (P) Ltd., 14, Bankim Chatterji Street, Calcutta-12.
7.	International Book House, Main Road, Trivandrum.	26.	The International Book Service, Deccan Gymkhana, Poona-4.	43.	People's Book House, B-2-829/1, Nizam Shahi Road, Hyderabad Dn.
8.	The Presidency Book Supplies, 8-C, Pycroft Road, Triplicane, Madras-5.	27.	Bahri Brothers, 188, Lajpat Rai Market, Delhi-6.	44.	W. Newman & Co. Ltd., 3, Old Court House Street, Calcutta.
9.	Atma Ram & Sons, Kashmere Gate, Delhi-6.	28.	City Booksellers, Sohan-ganj Street, Delhi.	45.	Thacker Spink & Co. (1938) Private Ltd., 3, Esplanade East, Calcutta-1.
10.	Book Centre, Opp. Patna College, Patna.	29.	The National Law House, Near Indore General Library, Indore.	46.	Hindustan Diary Publishers, Market Street, Secunderabad.
11.	J. M. Jaina & Brothers, Mori Gate, Delhi-6.	30.	Charles Lambert & Co., 101, Mahatma Gandhi Road, Opp. Clock Tower, Fort, Bombay.	47.	Laxmi Narain Aggarwal, Hospital Road, Agra.
12.	The Cuttack Law Times Office, Cuttack-2.	31.	A. H. Wheeler & Co. (P) Ltd., 15, Elgin Road, Allahabad.	48.	Law Book Co., Sardar Patel Marg, Allahabad.
13.	The New Book Depot, Connaught Place, New Delhi.	32.	M. S. R. Murthy & Co., Visakhapatnam.	49.	D. B. Taraporevala & Sons Co. Private Ltd., 210, Dr. Naoroji Road, Bombay-1.
14.	The New Book Depot, 79, The Mall, Simla.	33.	The Loyal Book Depot, Chhipi Tank, Meerut.	50.	Chanderkant Chiman Lal Vora, Gandhi Road, Ahmedabad.
15.	The Central News Agency, 23/90, Connaught Circus, New Delhi.	34.	The Good Companion, Baroda.	51.	S. Krishnaswamy & Co., P.O. Teppakulam, Truchirappalli-1.
16.	Lok Milap, District Court Road, Bhavnagar.	35.	University Publishers, Railway Road, Jullundur City.	52.	Hyderabad Book Depot, Abid Road, (Gun Foundry), Hyderabad.
17.	Reeves & Co., 29, Park Street, Calcutta-16.	36.	Students Stores, Raghunath Bazar, Jammu-Tawi.	53.	M. Gulab Singh & Sons (P) Ltd., Press Area Mathura Road, New Delhi.

Agency No.	Name and address of the Agent	Agency No.	Name and address of the Agent	Agency No.	Name and address of the Agent
54.	(R) C. V. Venkatachala Iyer, Near Railway Station, Chalakudi. (S.I.)	68.	Oxford Book & Stationery Co., Scindia House, Connaught Place, New Delhi.	81.	Mittal & Co., 85-C, New Mandi, Muzaffar Nagar (U.P.).
55.	(R) The Chindambaram Provision Stores, Chindambaram.	69.	Makkala Pustaka Press, Balamandira, Gandhinagar. Bangalore-9.	82.	Firma K. L. Mukhopad- yay, 6/1A, Banchharam Akrur Lane, Calcutta-12.
56.	(R) K. M. Agarwal & Sons, Railway Book Stall, Udaipur (Rajasthan).	70.	Gandhi Samriti Trust, Bhavnagar.	83.	Freeland Publications (P) Ltd., 11-A/16, Lajpat Nagar, New Delhi-14.
57.	(R) The Swadesamitran Ltd., Mount Road, Madras.	71.	People's Book House, Opposite Jaganmohan Palace, Mysore-1.	84.	Goel Traders, 100-C, New Mandi, Muzaffar Nagar (U.P.).
58.	The Imperial Publishing Co., 3, Faiz Bazar, Darya- ganj, Delhi-6.	72.	'JAGRITI', Bhagalpur-2 (Bihar)	85.	Mehra Brothers, 50-G, Kalkaji, New Delhi-19.
59.	The High Commission of India Establishment Department, Aldwych, London, W.C.-2.	73.	The New Book Company (P) Ltd., Kitab Mahal, 188-90, Dr. Dadabhai Naoroji Road, Bombay.	86.	The Krishna Book Depot, Publishers, Booksellers, Stationers & News Agents, Main Bazar, Pathankot, (E.P.)
60.	Current Book Stores, Maruti Lane, Raghunat Dadaji Street, Bombay-1	74.	The English Book Depot, 78, Jhoke Road, Ferozepore Cantt.	87.	Dhanwantra Medical & Law Book House, 1522, Lajpat Rai Market, Delhi-6.
61.	International Consultants Corporation, 48C, Marred- pally (East), Secundera- bad (A.P.)	75.	Minerva Book Shop, 9, Jor Bagh Market, New Delhi-3.	88.	The United Book Agency, 48, Amritkaur Market, Paharganj, New Delhi.
62.	K. G. Aseervandam & Sons, Cloughpet, P. O. Ongole, Guntur Distt. (Andhra).	76.	People's Publishing House, Rani Jhansi Road, New Delhi-1.	89.	Pervaje's Book House, Book Sellers & News Agents, Koppikar Road, Hubli.
63.	The New Order Book Co., Ellis Bridge, Ahmedabad.	77.	Shri N. Chaoba Singh, Newspaper Agent, Ramlal Paul High School Annexe, Imphal, Manipur.	90.	B. S. Jain & Co., 71, Abupura, Muzaffarnagar (M.P.).
64.	The Triveni Publishers, Masulipatnam.	78.	Minerva Book Shop, The Mall, Simla-1.	91.	Swadeshi Vastu Bhandar, Booksellers, Jamnagar
65.	Deocan Book Stall, Fergu- son College Road, Poona-4.	79.	Universal Book Company, 20, Mahatma Gandhi Marg, Allahabad.	92.	Bhogilal L. Fanna, Book- stall Contractor, Railway Junction, Rajkot.
66.	Jayana Book Depot, Chap- parwala Kuan, Karol Bagh, New Delhi-5.	80.	Madhya Pradesh Book Centre, 41, Ahiliya Pura, Indore City (M.P.).	93.	Sikh Publishing House (P) Ltd., 7-C, Connaught Place, New Delhi.
67.	Bookland, 663, Madar Gate, Ajmer (Rajasthan).				