

# TWENTY THIRD REPORT COMMITTEE ON PUBLIC UNDERTAKINGS

(2007-2008)

(FOURTEENTH LOK SABHA)

# "GAIL (INDIA) LIMITED – A COMPREHENSIVE EXAMINATION" MINISTRY OF PETROLEUM & NATURAL GAS

(Action taken by the Government on the recommendations contained in the 17<sup>th</sup> Report of the Committee on Public Undertakings (14<sup>th</sup> Lok Sabha) on GAIL (India) Ltd. – A Comprehensive Examination.)



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LOK SABHA SECRETARIAT NEW DELHI

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# **COMPOSITION OF THE COMMITTEE ON PUBLIC UNDERTAKINGS** (2007-2008)

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#### **Shri Rupchand Pal**

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- 3. Shri Ramesh Bais
- Shri Gurudas Dasgupta 4.
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- Shri Francis K. George 6.
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- Shri Mohan Rawale 13.
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- 17 Shri R.K. Dhawan
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2.	Shri J.P. Sharma	Joint Secretary
3.	Smt. Anita Jain	Director
4.	Shri N.C. Gupta	Deputy Secretary
5.	Shri Bala Guru G.	Senior Executive Assistant

#### **INTRODUCTION**

- I, the Chairman, Committee on Public Undertakings having been authorized by the Committee to submit the Report on their behalf, present this Twenty Third Report on Action Taken by the Government on the recommendations contained in the Seventeenth Report of the Committee on Public Undertakings (Fourteenth Lok Sabha) on "Gail (India) Limited A comprehensive examination".
- 2. The Seventeenth Report of the Committee on Public Undertakings (2006-2007) was presented to Lok Sabha on 15 December 2006. Action Taken Replies of the Government to the recommendations contained in the Report were received on 31<sup>st</sup> August, 2007. The Committee on Public Undertakings considered and adopted this Report at their sittings held on 26<sup>th</sup> November, 2007. The Minutes of the sitting are given in Appendix I.
- 3. An analysis of the action taken by the Government on the recommendations contained in the 17<sup>th</sup> Report (2006-07) of the Committee is given in Appendix -II

New Delhi 26 November, 2007 5 Agrahayan, 1929 (S) RUPCHAND PAL Chairman Committee on Public Undertakings

# CHAPTER I

# **REPORT**

This Report of the Committee deals with the action taken by the Government on the recommendations contained in the Seventeenth Report (Fourteenth Lok Sabha) of the Committee on Public Undertakings (2006-07) on "GAIL (India) Limited-A comprehensive examination" which was presented to Lok Sabha on 15<sup>th</sup> December, 2006.

- 2. Action Taken notes have been received from Government in respect of all the recommendations contained in the Report. These have been categorized as follows:
  - (i) Recommendations / observations which have been accepted by the Government (Chapter II) SI. Nos. 1, 3(i), 3(ii), 3(iii), 4, 5(ii), 6(i), 6(ii), 6(iii), 7, 8, 10, 11,12.
  - (ii) Recommendations / observations which the Committee do not desire to pursue in view of the Government's replies (Chapter III) SI. No. 9
  - (ii) Recommendations / observations in respect of which replies of the Government have not been accepted by the Committee (Chapter IV)
    SI. No. 2
  - (iv) Recommendations / observations to which the Government have furnished interim replies.(Chapter V) SI. Nos. 5(i) and 5(iii).

The Committee will now deal with the action taken by the Government on some of the recommendations in the succeeding paragraphs.

# Recommendation No. 2

# **ORGANISATIONAL SET-UP**

3. The Committee in their Seventeenth Report have recommended with regard to 'Organizational Set-up" as follows: -

"The Committee note that GAIL's activities have increased manifold since its setting up in 1984. The Committee have been informed that the diverse business profile of Company, such as exploration & production, city gas marketing etc., has warranted a realignment of portfolio among various Directors which include creation of new directorates and accordingly a proposal for creation of the position of Director (Operations) has been put up before the HR Committee, a sub-committee of Board of Directors. The Committee are unable to understand the reasons due to which no decision has yet been taken by the HR Committee on the said

proposal. The Committee desire that the proposal for creation of Director (Operations) be cleared expeditiously and steps be taken to appoint Director (Operations) with due promptitude.

The Committee are also constrained to note that Ministry of Petroleum and Natural Gas have not communicated any decision on GAIL's proposal for requirement of additional independent Directors on its Board despite the fact that GAIL has taken up the matter with them number of times. The Committee need not emphasise the imperative need of full complement of Directors on the Board of GAIL for the effective and efficient functioning of its various activities. They therefore recommend that Ministry of Petroleum & Natural Gas should take immediate decision on GAIL's proposal for appointment of additional Directors. The Committee also recommend that a comprehensive review of organizational setup of GAIL may be undertaken in view of its fast expanding role and responsibility in meeting the energy requirements of the country."

### 4. The Government have in their reply stated as follows: -

"The proposal for creation of position of Director (Operations) was submitted to HR sub-committee of Board of Directors of GAIL. It was proposed that in view of the diverse business profile of GAIL, realignment of portfolios among various directorates(s), including creation of the position of Director (Operations), is needed. The proposal is under active consideration of the HR sub-committee.

Regarding appointment of Independent Directors on the Board of GAIL, the Search Committee of the DPE has recently recommended some names for the post of Independent Directors on the Board of the GAIL (India) Limited. The recommendations of the Search Committee are being examined in the Ministry."

#### 5. <u>Comments of the Committee</u>

In their original report the Committee had observed that diverse business profile of the Company such as exploration and production, city gas marketing, etc. had warranted a realignment of portfolio among various directors and a proposal for creation of position of Director (Operations) was put up before the HR Sub-committee. The Committee had therefore recommended that the above proposal should be cleared expeditiously and steps be taken to appoint Director (Operations) with due promptitude.

From the reply of the Government, the Committee regret to note that despite their specific recommendation for appointment of Director (Operations), GAIL has not taken any action and the matter still continues to be under consideration of HR Sub-committee. The Committee take

strong exception to the inaction on the part of GAIL in this regard. The Committee would like to be apprised of the reasons due to which even after a lapse of six months since their recommendation in this regard, HR Subcommittee has not been able to take any decision. The Committee can safely conclude that the Government have virtually not taken any action on the recommendation.

The Committee while reiterating their earlier recommendation would like Director (Operations) to be appointed within a specific time frame under intimation to them.

Regarding appointment of independent Directors on the Board of GAIL, the Committee note that Search Committee of DPE has recommended some names which are under examination in the Ministry. The Committee desire that Ministry should take an early decision in this matter so that independent Directors could be appointed without any further delay.

#### Recommendation No. 5(i)

## The Role of GAIL in India's Gas Security

6. The Committee in their Seventeenth Report have recommended with regard to "The Role of GAIL in India's Gas Security" as follows: -

"In view of steep hike in prices of crude oil in international market and resultant strain on foreign exchange reserves of the country, it is imperative that concerted efforts are made to augment the supply of gas which is relatively cheaper and cleaner fuel to meet the energy requirements of the country. The Committee note that that at present natural gas meets only 8% of the energy requirement of our country and its share is projected to grow up to 20% in the next twenty years i.e. by the year 2026. To reduce the wide gap of 40% between demand and supply of natural gas and to augment the share of natural gas up to 20% in the energy sector in the next twenty years, the Committee note that a multipronged strategy has been adopted by GAIL which include participation in NELP blocks; setting up of LNG terminals to import LNG; bringing of gas by transnational pipelines; extraction of gas by use of clean coal technology etc. The above-mentioned multi-pronged strategy adopted to ensure the gas security of India has been dealt with as under:

The Committee note that Government has taken steps for importing gas through transnational pipelines from gas rich countries, namely, Iran, Myanmar and Turkmenistan and the three pipeline proposals are Iran-Pakistan-India pipeline, Turkmenistan-Afghanistan-Pakistan-India pipeline

and Myanmar-India pipeline. As regards Iran-Pakistan-India pipeline, Committee note the matter has been under discussion with Iran for the last 2  $\frac{1}{2}$  years and the only issue which is pending resolution pertains to price at which gas is to be sold by Iran to Pakistan and India. The Committee were informed by Secretary, Ministry of Petroleum and Natural Gas during evidence on  $26^{th}$  September, 2006 that he was confident that pricing issue would be resolved over the next two months. The Committee hope that the stalemate with regard to gas price issue would be resolved soon.

As regards Turkmenistan - Afghanistan - Pakistan India (TAPI) Pipeline project, the Committee note that Asian Development Bank (ADB) which is the technical sponsor of the TAPI pipeline project has been requested to go to Turkmenistan and make survey about the adequacy of reserves to supply gas to India, and to give the necessary certification. The Committee have been further informed that discussion will start only after the certification is given by ADB to India. The Committee desire that the matter may be vigorously pursued with ADB and based on their certification steps may be taken to negotiate with Turkmenistan for supply of gas.

With regard to gas from Myanmar, the Committee were informed that Myanmar has floated an international bid for the two blocks, and India has also put in the bid, and if that bid is acceptable to Myanmar, then the negotiations would reach the final shape. The Committee desire that GAIL/Ministry should play more proactive role and make all out efforts to bring in natural gas into India through transnational pipelines from Iran, Myanmar and Turkmenistan."

7. The Government have in their reply stated as follows: -

#### Iran-Pakistan-India (IPI)

"With regard to Iran-Pakistan-India (IPI) pipeline project, six trilateral meetings between Iran, Pakistan and India have been held. The issue of price of natural gas has not been resolved so far. During the 4<sup>th</sup> tripartite meeting held in Tehran on January 24 & 25, 2007, a gas pricing formula regarding pricing of gas at Iran-Pakistan border was agreed between Iran and Pakistan sides, subject to approval from the respective Governments. The Indian side agreed to respond to the pricing formula. India conveyed to the Iranian side, vide letter dated 28.2.2007, that total price payable at India-Pakistan border would also depend on transportation cost and transit fees payable by India to Pakistan for passage of gas through Pakistan; as there was no clarity on these, it was not possible for India to decide regarding the total price implication. Subsequently, Iran demanded price escalation in the 5<sup>th</sup> Tripartite JWG meeting held at Tehran during May 27-30, 2007, which both India and Pakistan disagreed with. The 6th Tripartite meeting was held in New Delhi on June 28-29, 2007, in which the issues relating to gas price review clause were discussed. Discussions are also being held amongst the participating countries on issues relating to gas availability from dedicated fields and development plan, delivery point for gas supply to India, governing law, GSPA related issues, etc. It was decided to carry forward the discussions to the next round of meetings for resolution of some of the contentious issues.

#### <u>Turkmenistan-Afghanistan-Pakistan (TAP)</u>

With regard to Turkmenistan-Afghanistan-Pakistan (TAP) project, first Technical Working Group meeting was held at Ashgabat on April 17-18, 2007, which India attended. For India to join the project, inter – Governmental Framework Agreement signed between Turkmenistan, Afghanistan and Pakistan has to be amended. Draft of the revised Framework Agreement has been received. The draft Framework Agreement is under examination in consultation with the concerned Ministries.

#### **Myanmar-India Pipeline**

With regard to Myanmar-India pipeline, India has made consistent efforts to source gas from A1 and A3 blocks in Myanmar. The then Minister (P&NG) participated in a trilateral Ministerial meeting between the Oil Ministers of Bangladesh, Myanmar and India in January 2005 at Yangon, Myanmar. In pursuance of the trilateral Joint Press Statement released after that meeting, a Techno-Commercial Working Committee (TCWC) of representatives of the three countries was constituted. The first meeting of the TCWC was held in Yangon on February 24 and 25, 2005. The TCWC prepared a draft MoU to be signed by the three Oil Ministers after the approval of their respective Governments. However, the MoU could not be approved on account of differences between India and Bangladesh, as Bangladesh sought to raise certain bilateral issues in the trilateral MoU.

In view of the above, India pursued the alternative option of a pipeline from Myanmar through North-Eastern States of India. GAIL completed a Detailed Feasibility Report for this pipeline, for evacuating Myanmar gas to India through the north-eastern states. The pipeline was projected to be routed through Mizoram, Assam, West Bengal and Bihar, with a pipeline length of 1575 km within the Indian territory till Gaya in Bihar.

Subsequently, Myanmar invited bids for selling natural gas from A1 and A3 offshore blocks by the pipeline route. In response, GAIL submitted its bid in September 2006. Myanmar authorities later informed that the price quoted by all the bidders did not meet their expectation. Subsequently, Myanmar invited bids for sale of gas from these blocks through LNG route. This bid was submitted by GAIL on December 4, 2006. The bids received were also not acceptable to Myanmar. However, in a meeting held in February 2007 between Myanmar Government and PetroChina, Myanmar Government decided that the gas from A1 and A3 blocks would be sold to China through the pipeline route. This development was conveyed to the consortium partners by Myanmar Government during a meeting held at Nay Pyi Taw (NPT) on March 16, 2007. During this meeting, GAIL impressed upon the other partners and

Myanmar Government that GAIL's pipeline offer was still the most competitive and offered optimum value for them due to proximity of India to these fields. However, Myanmar Government stuck to their decision to sell the gas to China."

#### 8. Comments of the Committee

For augmenting the share of natural gas upto 20 per cent in the energy sector and for strengthening the role of GAIL in India's gas security, the Committee had felt the imperative need of bringing natural gas by transnational pipelines. As regards, the Iran-Pakistan India pipeline, the Committee had recommended for early resolving of the issue of gas price with Iran.

The Ministry of Petroleum & Natural Gas has in their reply stated that discussions are being held among the participating countries. The Ministry has also further stated that the discussions for resolution of the contentious issues would be carried forward to the next round of meetings with Iran.

The Committee note that the reply in respect of the above recommendation is only interim in nature as Iran-Pak-India pipeline discussions are still going on. The Committee would like to apprised of the final outcome of the discussion.

# Recommendation No. 5 (iii)

#### **Underground Coal Gasification**

9. The Committee in their Seventeenth Report have recommended with regard to "Underground Coal Gasification" as follows: -

"The Committee note that underground coal gasification is a potential economic means for extracting gas from deep seated and /or isolated coal/lignite deposit resources which may not be amenable to conventional physical extraction economically. As per estimates of ONGC, the recoverable energy from Mehsana-Ahmedabad block with coal reserves of 63 billion tonnes in the form of gas is estimated to be equivalent to 15,000 billion cubic meters (BCM) of natural gas. Considering vast unexplored deposits of coal where conventional mining methods are not feasible, it is imperative that underground coal gasification process is used to extract gas, which would go a long way in meeting our energy requirements. The committee note that GAIL has entered into an agreement with agencies, which are competent in coal gasification, and is in the process of identifying 4-5 blocks in different parts of the country. The Committee desire that this exercise should be completed within a time frame and

work pertaining to extraction of gas through UCG be started expeditiously."

#### 10. The Government have in their reply stated as follows: -

"The technology is for production of synthesis gas from the In situ Lignite gasification project. GAIL has signed an MoU with Government of Rajasthan to set up a pilot project at Barmer. It is planned to be an Integrated Gasification Combined Cycle (IGCC) plant of 5 MW power capacity.

GAIL has signed an MoU with M/s Ergo Exergy Technologies Inc., Canada, who are technology providers and leaders in the field. GAIL is in the process of signing a General License Agreement with M/s Ergo Exergy Technologies Inc. for the project. Under this, Site Selection study and Pre-feasibility study would be carried out for establishing the lignite potential at site before taking up the pilot gasification project."

#### 11. Comments of the Committee

The Committee in their original report had recommended that the process of identifying coal blocks should be completed within a time frame and work pertaining to the extraction of gas through Underground Coal Gasification (UCG) be started expeditiously.

The Ministry has in their reply stated that GAIL has signed an MoU with Government of Rajasthan to set up a pilot project at Barmer. The Ministry has further stated that GAIL is in the process of signing a General License Agreement with M/s Ergo Exergy Technologies Inc. and site selection study and pre-feasibility study would be carried out for establishing the lignite potential at site before taking up the pilot gasification project.

The Committee note that the reply in respect of the above recommendation is interim in nature as the Ministry/GAIL has just embarked on a pilot project for Underground Coal Gasification. The site selection study and pre-feasibility study are yet to be carried out. In view of the fact that UCG technology is environment friendly and has a huge potential to meet India's energy security requirement, the Committee emphasise the imperative need of expeditious implementation of above projects. The Committee therefore recommend that this exercise should be completed within a specific time frame and work pertaining to extraction of gas through UCG be started expeditiously.

#### **CHAPTER II**

#### RECOMMENDATIONS THAT HAVE BEEN ACCEPTED BY GOVERNMENT

#### Recommendation No. 1

## <u>Historical background and present activities</u>

GAIL (India) Limited which was initially known as Gas Authority of India Limited, was established on 16<sup>th</sup> August, 1984 with the objective of creating necessary infrastructure for transportation, processing and distribution of natural gas; planning, designing and construction of pipelines, distribution systems and facilities for extraction of LPG and C2/C3; to operate and maintain the systems to be taken over from ONGC/ OIL as well as facilities to be set up by it and to liaise and coordinate with gas production organizations, Government and the gas users to ensure proper utilization of gas.

The Committee are happy to note that over the last 22 years, GAIL has diversified its portfolio into a number of new areas such as gas processing, production of LPG, production of liquid carbons, gas cracking, polymer production etc.; and today this company is the owner and operator of India's largest gas transmission network of about 5600 km length of pipelines, world's longest exclusive Jamnagar – Loni LPG pipeline, India's largest gas based petrochemical complex, seven gas processing facilities with a capacity of more than 1 million metric tonnes per annum (MMTPA) of LPG etc. GAIL has also been receiving "Excellent rating" as regards the MoUs signed with the Ministry of Petroleum & Natural Gas and has been performing extremely well so far as its financial performance is concerned which is evident from the fact that the Company has added 3.7 US billion dollars to its market capitalization.

While appreciating the above achievements of GAIL, the Committee find that in many other aspects, viz., capacity utilization of pipelines, share in natural gas transmission business, gas storage capacity, city gas distribution, gas exploration activities, bringing gas by transnational pipelines, setting up of LNG terminals, underground coal gasification, completion of various limbs of the proposed gas grid, etc, their performance needs further improvement.

After going into the working of GAIL (India) Limited, the Committee are of the view that a lot more is required to be done in many areas. These and other aspects have been dealt with by the Committee in detail in the subsequent paragraphs.

#### Reply of the Government

No comments.

#### Recommendation No. 3(i)

#### PERFORMANCE OF THE COMPANY

#### Project Appraisal

While the Committee appreciate the successful execution of Dahej-Vijaipur gas pipeline, which had the distinction of both cost reduction as well as completion of the project by 5-1/2 months ahead of schedule, in the case of Dahej-Uran pipeline, the Committee are constrained to note that only 55% of the project had been completed by July 2006 and the date of commissioning has also been rescheduled to March 2007. The reasons for delay in commissioning of the project have been attributed mainly due to non-tieing-up of the gas source and delay in supply of gas. The Jagoti-Pitampur pipeline whose completion date has been revised from July, 2006 to December 2006 is further expected to be delayed by 2 months due to delay in award of order for procurement of pipeline. The Committee are constrained to note that despite revision in the completion schedule in case of Dahej-Uran pipeline and Jagoti-Pitampur pipeline, they are not expected to be completed even on their revised dates of completion. The Committee would like to emphasize the imperative need of completion of pipeline projects on time not only for augmenting GAIL's share in transmission of natural gas which has declined from 90% in 2003-04 to 86.07% in 2005-06, but also to facilitate uninterrupted supply of gas to power, fertilizer, petrochemical industries located in various States. The Committee desire that the progress of work of these pipeline projects be monitored continuously so as to ensure that they are completed as per their revised schedule.

As regards, Dadri-Panipat pipeline project, which has been put under hold for want of Gas Sales Agreement /Terms-Sheet Agreement with Indian Oil Corporation Ltd., the Committee desire that negotiations be held with IOC for signing of TSA/GSA and steps may be taken for early construction of Dadri-Panipat pipeline.

The Committee are unhappy to note that second part of the HDPE plant at

Pata which was scheduled to be completed by 30 April 06 has been now delayed due to non availability of process package in time and the project is now expected to be completed by 24 March 07. The Committee are not convinced with the reasons cited for delay in availability of process package viz, SIA (Secretariat of Industrial Assistance) approval for technology transfer taking nearly five months as against normal time of 15 days as they feel that advance action ought to have been initiated for evaluation of different technologies. The Committee recommend that in future all these steps should be initiated well in advance so as to obviate any delay in completion of projects in time.

In view of undue delay that has been taking place in execution of projects by GAIL, the Committee feel that the set up in GAIL meant for project formulation and implementation needs to be improved. The Committee, therefore, desire that a stricter mechanism for monitoring and control of projects at the formulation and implementation stage should be evolved.

#### Reply of the Government

The actions which have been taken in respect of each of these projects and the overall steps being taken for faster implementation of GAIL's projects are as under:

# <u>Dahej-Uran Pipeline (DUPL)</u>

The DUPL project was approved by the Board of GAIL on 21.6.2005, wherein the Board noted that the project should be completed by February 2007. Thereafter, the project received attention of the Government at the highest level, since the gas from DUPL was to flow to Dabhol power project, revival of which was high on the Government's priority. The project has been monitored by the Empowered Group of Ministers (EGoM) and the Cabinet Secretary.

All out efforts have been made to complete the project within the schedule. The contracts for procurement of line pipes and the EPC contracts for construction were awarded by May 2006. However, the project ran into difficulty, because of stiff resistance from villagers and local leaders in the states of Gujarat and Maharashtra. The farmers demanded exorbitant rates for compensation of crops and were not allowing the work to proceed even after disbursement of compensation as declared by the Competent Authority. Several rounds of meetings were held with Chief Secretaries and Principal Secretaries (Revenue)

of Maharashtra and Gujarat. In fact, the Government of Maharashtra had to set up a Special Task Force under the chairpersonship of Chief Secretary to expedite the process of approvals. At a number of locations, work could be done only under police protection and after enforcement of notification under Section 144 of CrPC. The pipeline has since been commissioned on July 11, 2007.

#### Jagoti - Pitampur Pipeline

The Jagoti-Pitampur Pipeline has been completed on March 24, 2007. Although the project has been delayed from its original schedule, the gas supply to the customers has commenced in accordance with the contractual schedule without any 'sale or pay' liability on GAIL.

# **Dadri-Panipat Pipeline**

The Dadri-Panipat Pipeline is being implemented by IOC and work is in progress. The 30" pipeline was designed for captive use by the Panipat refinery. The pipeline has a capacity of 8 MMSCMD at pipeline pressure of 54 kg/cm<sup>2</sup>. However, later it was decided to jointly implement the project with GAIL and it was decided that the pipeline pressure be augmented by GAIL by way of compressors, so that the pipeline could carry 20 MMSCMD gas at a pressure of 92 kg/cm<sup>2</sup>. So the additional capacity available to GAIL on IOC's Dadri-Panipat pipeline would have been only 12 MMSCMD.

GAIL has represented to the Ministry that their projections indicated that the gas requirement of their customers in Haryana and Punjab would be 30 MMSCMD. This included 6 MMSCMD for Pragati Power Corporation Limited (PPCL) at Bawana, which had to be supplied by the year 2009 on account of the Commonwealth Games. PPCL's plant at Bawana was also not on the IOC's pipeline segment. Accordingly, the Ministry decided that GAIL be allowed to lay a separate 28 MMSCMD Dadri-Bawana Sangrur-Ludhiana-Nangal pipeline (with tap off from Sangrur to Bhatinda) for which authorization has been issued on July 11, 2007. GAIL's pipeline would supply gas to PPCL power plant at Bawana, NFL fertilizer plants at Bhatinda and Nangal and other customers on the route.

#### **Pata Expansion Project**

Recommendations of the Committee have been noted and action is being initiated for compliance of the same for future projects.

### General Steps taken for ensuring timely completion of Projects

A number of steps have been initiated to have a stringent control on project implementation, including submitting status report to the GAIL Board on a monthly basis and explaining to the Board the reasons for slippages. Besides the above, review meetings are being taken for each project at the level of Director and CMD on fortnightly basis to monitor the progress of projects and to initiate appropriate remedial actions, wherever there are slippages.

#### Recommendation No. 3(ii)

#### Financial performance of GAIL

The Committee note that while GAIL has been earning profits continuously year after year, their profitability has been affected adversely due to sharing of subsidy burden of downstream oil marketing PSUs on LPG and kerosene. Besides adversely affecting the profitability of the Company, the Committee note that due to uncertainty regarding the quantum of subsidy burden to be shared, GAIL is not in a position to make any realistic estimate of its profits. In the absence of realistic estimates of its profits, Committee have every reason to believe that GAIL would not be in a position to prepare its future plans in a fair and objective manner. The Committee note that Dr. Rangarajan Committee on pricing and taxation of petroleum products has recommended for discontinuing the practice of asking ONGC/OIL/GAIL to provide upstream assistance. They have observed that "to the extent the Government decides to extend subsidies, the burden should be borne entirely and transparently in the Union Budget and the oil marketing companies should be freed from the burden of subsidy." This Committee has also expressed the view that if no action is taken and Government is unable to provide the required subsidies, the financial position of the public sector oil companies will deteriorate rapidly and jeopardize the country's energy security. The Committee on Public Undertakings therefore recommend that the present arrangement wherein GAIL is required to share the subsidy burden on account of LPG and kerosene may be reviewed in the light of recommendations made by Dr. S. Rangarajan Committee so as to enable it to make realistic assessment of its profits, and to protect its financial as well as functional autonomy, while the Government may find other revenues like reduction of duties and setting up of oil price stabilisation fund to protect the interests of the common man, 'aam admi'.

# Reply of the Government

Downstream Companies marketing sensitive retail products have not increased the prices of consumer products in line with international prices. It has been decided that a part of the under-recoveries of the downstream marketing PSUs be borne by the upstream Companies, viz., ONGC, OIL and GAIL, which have actually benefited from the high international prices.

However, the recommendations of the Committee would be considered by the Government.

#### Recommendation No. 3(iii)

# Capacity utilization

The Committee are constrained to note that the capacity utilization of the existing gas transmission infrastructure for transportation of natural gas and LPG is merely 60-63%. In case of natural gas pipelines while it is appreciable that the main inter-state gas pipelines are being used to 100% capacity, the Committee regret to note that the utilization of smaller network of natural gas pipelines in the states of Gujarat, Andhra Pradesh, Tamil Nadu, Maharashtra and Tripura is merely 60% mainly due to shortage of gas from the main producer ONGC. In view of depleting gas reserves of ONGC, Committee desire that GAIL should explore new avenues to meet the deficit by sourcing additional gas/LNG so as to ensure the optimum utilization of natural gas pipelines. The Committee have been informed that to improve capacity utilization, GAIL has a proposal to connect Dabhol and Hazira LNG terminals to GAIL's grid. The Committee desire that this should be done with due promptitude. The Committee also recommend that discussions which are in progress with major potential producers of gas viz., SHELL, RIL, GSPL, PMT, ONGC etc. for sourcing / transportation of gas from their new finds in future should be held to their logical conclusion so as to ensure utilization of natural gas pipelines capacity to optimum level.

As regards capacity utilisation of LPG pipelines, the Committee note that Vizag-Secunderabad LPG pipeline (VSPL) is being utilized to the level of 30 to 40 percent only due to non-usage of pipeline to the fullest extent by Oil Marketing

Companies (OMCs) who are bringing in LPG by road and rail. The Committee have also been informed that due to limited availability of LPG at Vizag through indigenous refinery production/ imports, OMCs are sourcing part requirement of their bottling plants located at Secunderabad through alternate supply source. The Committee need not emphasise that under-utilization of pipelines, construction of which involves huge expenditure is a gross wastage of public funds and loss to the country. It is therefore imperative that all efforts are made to augment capacity utilization of these pipelines. The Committee find that Ministry of Petroleum & Natural Gas has undertaken certain measures like setting up of LPG cavern storage at Vizag, VSPL connectivity to Parwada Bottling Plant of IOC and Rajmundry plant of HPCL etc., to increase VSPL utilization. The Committee desire that all these measures be implemented with due promptitude so that VSPL is utilized to its maximum capacity.

# Reply of the Government

As suggested by the Committee in its recommendations, GAIL has taken up a number of initiatives to improve the capacity utilization of its pipelines. This involves GAIL's activities as a transporter. In many of these cases, GAIL would be transporting gas marketed by some other entity. The initiatives in this direction are detailed herein:-

- 1. Pursuant to the signing of GSA between GAIL and ONGC on 7.7.06, GAIL is making attempts to source gas from ONGC's new fields and additional gas from the existing fields of ONGC. The Companies are in discussions for exploring areas of cooperation, that include supply of additional gas/new gas (including CBM), utilization of pipelines, settlement of outstanding issues, joint participation in upstream fields, etc.
- 2. GAIL has signed an MoU with Reliance Industries Limited (RIL) to source natural gas from K.G. Basin for transportation using GAIL's pipeline network, apart from GAIL's marketing rights for a specified quantity. Supply of this gas to GAIL's network at Kakinada in Andhra Pradesh and at Uran in Maharashtra is expected to increase the utilization of local pipeline networks in Andhra Pradesh and Maharashtra from the year 2008. Reliance Gas Transportation Infrastructure Limited (RGTIL) has been granted authorization for Vijaywada-Nellore-Chennai and Chennai-Tuticorin pipelines. RIL's natural gas from KG basin would be transported on these pipelines to feed customers on GAIL's network in Tamil

Nadu, which would increase the utilization of GAIL's network in Tamil Nadu.

- 3. PLL has planned expansion of Dahej terminal from 5 MMTPA to 7.5 MMTPA, which is expected to be commissioned in 2008-09. This R-LNG, including the share of off takers other than GAIL, would be transported on GAIL's network.
- 4. Additional gas of about 6 MMSCMD is expected from Tapti fileds of PMT JV. JV is currently marketing about 4.8 MMSCMD gas from PMT fields directly to the customers under three-year contracts valid till March 2008. GAIL has taken up with PMT JV for marketing for tie up of the additional gas, as well as the above 4.8 MMSCMD gas. The additional gas would, any way, increase the capacity utilization of GAIL's pipeline network.
- 5. GAIL has concluded negotiations for price revision for Ravva Satellite gas with Ravva JV partners in December 20, 2006. The side letter signed between the parties envisages upply of additional gas of about 1100 MMSCM to be supplied till the year 2011. During the negotiation meetings, Ravva JV also shared details of additional gas availability from Ravva III fields in KG basin; GAIL has conveyed its interest for sourcing this gas and discussion for this is likely to commence in the near future.
- 6. Pipeline has been laid to connect Hazira LNG Private Limited (HLPL) terminal at Hazira with GAIL's network, so that R-LNG from the HLPL terminal can be transported through GAIL's network to supply to customers in the Northern and Western market.
- 7. DUPL and DPPL pipelines have been commissioned. Indigenously produced gas from Gujarat and R-LNG from the LNG terminals can be transported to Maharashtra market through DUPL. DPPL will be used to transport R-LNG to Ratnagiri Power Plant. This will enhance the prospect for higher utilization of local network in Maharashtra.
- 8. Spot cargoes of R-LNG from PLL and HLPL have also helped in increasing the capacity utilization of GAIL's pipelines.
- 9. GAIL is in discussion with Great Eastern Energy Company Limited (GEECL) for tie-up of CBM Gas. Draft-term sheet is to be discussed and finalized between GAIL and GEECL for CBM Gas.

# Vizag Secunderabad Pipe Line (VSPL)

# **Capacity Utilization**

VSPL is a 600 km long cross country LPG pipeline having LPG transportation capacity of about 1.33 MMTPA. It was commissioned in July 2004 for transporting LPG from HPCL refinery/ EIPL import facility at Vizag to Secundrabad (Cherlapally) via Vijayawada to feed the en-route LPG bottling plants of PSU Oil Marketing Companies (OMCs).

At the time of planning of VSPL, it was envisaged that transportation capacity of 0.8 MMTPA will be achieved by 2014-15 through utilization by Public Sector OMCs and balance by the Private Marketeers marketing LPG under Parallel Marketing Scheme (PMS). Public Sector OMCs are transporting LPG through this pipeline to their six bottling plants located at Vijayawada and Secunderabad en-route VSPL, while private marketeers are not coming forward for LPG marketing because of the subsidy by the Government.

The quantity of LPG transported during 2004-05 and 2005-06 was 0.137 MMTPA and 0.316 MMTPA respectively. The utilization expected in the current year 2006-07 will be around 0.459 MMPTA.

### Reasons for lower capacity utilization:

- 1. LPG availability at Vizag through indigenous refinery production/imports is limited, as OMCs are not able to receive full LPG import parcel due to inadequate LPG storage available at Vizag. Therefore, OMCs are partly sourcing the requirement of their bottling plants located at Secundrabad through alternate supply sources, such as Mangalore, Ratnagiri, Mumbai and Hazira through road/rail. Moreover, sourcing of products for Secundrabad through rail is sometimes cheaper.
- 2. OMCs are presently meeting 75-80% of the total LPG requirement of all the bottling plants en-route VSPL through pipeline, which is about 0.46 MMTPA as against VSPL capacity of 1.33 MMTPA.

#### Measures undertaken to increase the VSPL utilization:

1. Discussions are progressing with IOC and HPCL to provide VSPL connectivity to Parwada bottling plant and Rajamundhry plant respectively within the next 1-2 years, which will enhance VSPL utilization.

- 2. Setting up of LPG Cavern storage of 60,000 MT capacity at Vizag by HPCL in joint venture with TOTAL, France by September 2007 will augment the LPG availability at Vizag through receipt of large import parcel, which will improve VSPL utilization.
- 3. GAIL is exploring the possibility of transportation of POL products through VSPL, thus proposing to make VSPL a multi-product pipeline.

#### Recommendation No. 4

#### Gas exploration by GAIL

GAIL was setup by Government of India primarily to undertake the activities pertaining to transmission and marketing of natural gas and to establish long distance gas pipelines for transportation to locations where gas was to be used as a feedstock and fuel. To ensure long term gas supply security from multiple natural gas sources, the Company has also ventured into exploration and production activities through joint ventures/equity participation routes. The Committee however note that GAIL's performance in exploratory activities are not at all impressive which is evident from the fact that out of 16 blocks awarded to GAIL's consortium so far, its contribution is confined to equity participation varying from 10-80% and in none of the blocks GAIL has any bid as a main operator. The Committee are of the view that if GAIL is not an operator in any of the blocks, wherein it has equity participation, it has limited control over the actual cost of developing the reserves.

The Committee feel that if GAIL has to actively participate in exploration activities, it should strive to become an operator. In view of qualification criteria of bidding document under NELP-VI, Committee note that GAIL cannot bid as an operator on its own as operatorship experience has now been made mandatory. It can however participate as a joint operating partner along with other operators. Committee desire that accordingly GAIL should strive to become joint operating partner along with other operators and also assume operatorship on a rotational basis under the production sharing contracts with other partners. The Committee further recommend that GAIL should make every endeavour to become operator in overseas blocks.

# Reply of the Government

GAIL has recognized the importance of operatorship of blocks in order to intensify its role in the E&P sector. So, while bidding for blocks in the NELP-VI round, since the qualifying criteria did not permit sole operatorship, bids have been submitted on Joint operatorship basis in two of the blocks. The details of these bids are as under:-

SI. No.	Description	Details		
1	Block	RJ-ONN-2004/1 (Block – 19)		
	Location	Rajasthan Onland		
	Operator GAIL (20%) & GSPC (20%) as Joint-			
	Other Partners	HPCL (20%), BPCL-10%, Hallworthy-10%,		
		Silverwave (10%), Nitin Fire (10%)		
2	Block	KG-ONN-2004/1 (Block-28)		
	Location	Krishna-Godhavari Basin Onland		
	Operator	GAIL (11%)-Petrogas (44%) as Joint-Operators		
	Other Partners	HPCL (30%), Silverwave (15%)		

The award of blocks in NELP-VI has been announced and GAIL consortium has been successful in block RJ-ONN-2004/1 on joint operatorship basis.

Further, in an existing block, viz., CB-ONN-2000/1 in Cambay onland, where discovery of oil has already been made, GAIL has staked its claim for operatorship, in accordance with the provisions of Joint Operating Agreement (JOA) between the partners, which provided that the operatorship will change on rotational basis. The matter is being pursued with the existing Operator of the block, viz., Gujarat State Petroleum Corporation Ltd (GSPC).

Further, in the existing blocks, where GAIL has equity participation but is not an operating partner, GAIL has assumed an active role in close monitoring and control of operations being performed by other operators.

GAIL is constantly looking for opportunities both within and outside India for acquisition of E&P blocks and Oil / Gas Assets, including those where GAIL could be an operator. GAIL is gearing up its work force, infrastructure and expertise, so that it is ready to function effectively as a sound E&P company. GAIL has developed a work station with requisite software for G&G studies, fully complemented by trained Geologists and Geophysicists, including senior advisory professionals, besides a team of project engineers for the E&P area.

# Recommendation No. 5 (ii)

# **Liquefied Natural Gas (LNG)**

The Committee note that country is importing close to 30-35 million cubic meters of gas per day equivalent of LNG which is regasified at LNG terminals. The advantage of LNG is that gas can reach through cryogenic tankers by sea to various locations on the coastlines. Thus there is a need to give added thrust to LNG imports. The Committee have been informed that GAIL has signed an MoU with NIGEC, an Iranian Company in June, 2005 to bring five million tones of LNG from Iran to Kochi. The Committee desire that GAIL/Ministry of Petroleum & Natural Gas should vigorously pursue the matter with Iranian Government so as to clinch the deal at the earliest possible time. The Committee also note that Petronet LNG is holding discussions with EXON MOBIL for supply of LNG from Australia. However, the project is getting delayed due to environmental problems. The Committee desire that the bottlenecks that are coming in the way of supply of LNG from Australia should be sorted out through negotiations. To further augment the import of LNG, the Committee recommend that GAIL should explore the feasibility of import of LNG from all other LNG producing countries.

Besides import of LNG, construction of LNG terminals is equally important because LNG, which comes in liquid form from exporting countries through ships, is converted into gaseous form at LNG terminals. The Committee regret to note that as against the target of commissioning four LNG terminals by the end of tenth Plan Period, only Petronet's Dahej terminal and HLPL's Hajira terminal were commissioned in April, 2004 and 2005 respectively and the construction of LNG terminals at Dabhol, Ennore, Mangalore, Kochi and expansion of LNG terminal at Dahej etc., are at initial stages only. There are reports that the Dabhol LNG terminal is proposed to be handed over to some private party which may not be in the overall interests of the development in the particular area. The Committee understand the implications of construction of LNG terminals without finalizing the deal for LNG imports, which would be an idle investment. They would however like to emphasise the point that there should be no unnecessary delay in construction of LNG terminals in case the deal is finalised.

# **Reply of the Government**

- 1. Regarding Sale & Purchase Agreement (SPA) for import of 5 MMTPA of LNG, the matter is being pursued with the Government of Iran. Minister (P&NG) discussed the issue with President of Iran at Shanghai in June 2006 and again during his recent visit to Tehran on April 25-26, 2007. President of Iran assured Minister (P&NG) that Iran is committed to both IPI pipeline project and export of LNG on equal terms.
- 2. PLL is at advanced stage of discussion with Gorgon, Australia for import of 2.5 MMTPA LNG for Kochi LNG Terminal.
- 3. GAIL and PLL are exploring possibility of import of LNG from various potential suppliers.
- 4.1 Dabhol LNG terminal is expected to be completed by end of March 2008. The terminal will, however, become fully operational only after completion of breakwater facilities in May 2010.
- 4.2 Dahej LNG terminal is being expanded from current 5 MMTPA capacity to 10 MMTPA capacity. The expanded facility is expected to be commissioned by last guarter of 2008.
- 4.3 PLL is setting up an LNG terminal at Kochi. Various pre-project activities have been completed and various statutory approvals have been obtained. Site leveling work has been completed and construction of boundary walls has commenced. Process for selection of Project Management Consultant is underway. Final Techo-Commercial bids for selection of EPC contractors are under evaluation and the contract is likely to be awarded by September 2007. Project-related construction activities are likely to start by June 30, 2008. The terminal is expected to be commissioned by 2010-11.
- 4.4 With regard to setting up of LNG terminal at Mangalore by ONGC, the Company has initiated some pre-project activities. Construction of the terminal depends upon long-term LNG tie up, which is yet to be accomplished.
- 4.5 IOC proposes to set up an LNG terminal at Ennore. Some pre-project activities were initiated by IOC for the same. Techno-commercial feasibility study has been completed. Heads of agreement have been signed with potential customers. Draft MoU regarding fiscal incentives for the project and gas transmission pipelines has been discussed with Government of Tamil

Nadu. Draft MoU for allotment of land and other facilities has been discussed with Ennore Port Limited and TIDCO. A suitable land adjacent to Ennore Port has also been identified. IOC has been pursuing with various suppliers for sourcing of LNG for the project. However, the same is yet to be tied-up.

5. Various options for achieving long-term viability of Dabhol project are being considered by the Government. The option of hiving off of LNG terminal is one of the options being considered by the Government.

#### Recommendation No. 6 (i)

#### Gas transmission by GAIL

# 6 (i) Decline in percentage share of GAIL in natural gas transmission business:

The Committee note that GAIL's share in transmission business which was 100% at the time of setting up of company has plummeted to 86% mainly due to entry of multiple players as a result of opening up of the gas market. The Committee have been informed that subject to firming up of supply sources GAIL proposes to strengthen its natural gas transmission business by building key inter-state trunk pipelines to increase the total network from 5,600 km to 12,000 km over the next eight years at a cost of Rs.15,000 – 20,000 crores.

The Committee have been apprised that GAIL is holding negotiations with gas rich countries for import of LNG and import through transnational pipelines etc. Committee hope that with the firming up of these gas sources and augmentation of GAIL's pipeline infrastructure, GAIL would be able to enhance its share in gas transmission. Besides these steps, Committee desire that GAIL should negotiate with private gas producers and persuade them to utilise GAIL's pipelines for transmission of gas produced by them.

#### Reply of the Government

Recently, authorizations have been granted to GAIL for the following pipelines:-

SI. No.	Name of the pipeline	Length of pipeline
1.	Dabhol-Bangalore	730 km long pipeline from Dabhol to
	Pipeline	Bangalore
2.	Kochi-Kangjirkkod-	100 km long pipeline from Kochi to
	Mangalore Pipeline	Kanjirkkod, 440 km from Kanjirkkod to
		Bangalore and 322 km from
		Kanjirkkod to Mangalore
3.	Jagdishpur Haldia	876 km long pipeline from Jagdishpur
	Pipeline	to Haldia
4.	Dadri-Bawana-Nangal	590 km long pipeline from Dadri to
	Pipeline	Nangal
5.	Chhainsa-Gurgaon-	310 km long pipeline from Chhainsa to
	Jhajjar-Hissar Pipeline	Hissar and spurline to Bhiwadi,
	,	Manesar and Neemrana Industrial
		areas

Attempts being made to secure import of LNG are mentioned in the reply to Recommendation 5 (ii). The status of negotiations regarding import of natural gas through transnational pipelines is mentioned in the reply to Recommendation 5. Initiatives undertaken by GAIL to increase gas transmission through its pipeline network are mentioned in reply to Recommendation 3 (iii).

# Recommendation No. 6 (ii)

# **National Gas Grid Project**

The Committee note that GAIL has plans to develop inter-state gas grid (ISGG) under which gas available from different sources is planned to be connected to 16 limbs of ISGG to cater to the needs of customers along the network. In view of availability of gas from various sources and need for distribution to various parts of the country to meet requirements of the customers, it is imperative that a national gas grid is developed at the earliest. The Committee therefore recommend that the work of development of all the limbs should be closely monitored and completed within a specific time frame.

#### Reply of the Government

GAIL is operating more than 5600 km of pipelines with a capacity of around 130 MMSCMD for transportation of natural gas to various customers in the country. Gas pipelines are laid according to gas availability and location of production centres and customers. In light of the limited availability of natural gas in the country, gas pipelines have been laid connecting the limited production centres to the customers situated in relative proximity.

A number of Companies are at present laying pipeline infrastructure for transportation of gas in various parts of the country, linking production centres to demand centres. To regulate the same and to encourage investment in the sector, the Government of India has enacted 'The Petroleum and Natural Gas Regulatory Board Act, 2006' and notified the 'Policy for Development of Natural Gas Pipelines and City or Local Natural Gas Distribution Networks'.

GAIL completed the Dahej – Vijaipur pipeline in 2004 for evacuation of RLNG from PLL Dahej LNG terminal. GAIL commissioned Kelaras – Malanpur pipeline in July 2006 to supply gas near Gwalior in Madhya Pradesh. Dahej - Uran pipeline (DUPL) for supply of RLNG from Dahej PLL terminal to customers in Uran, Trombay, Thane- Belapur and Ambevili regions in Maharashtra has been commissioned on July 11, 2007. Dabhol - Panvel pipeline (DPPL) has also been commissioned; it would be an extension of DUPL to transport RLNG to Ratnagiri Gas & Power Project Limited, and later for evacuation of R-LNG from Dabhol LNG terminal.

Authorizations have been recently granted to GAIL for the following pipelines:-

SI. No.	Name of the pipeline	Approximate proposed length
		of pipeline
1.	Dabhol-Bangalore Pipeline	730 km
2.	Kochi-Kangjirkkod-Mangalore	862 km
	Pipeline	
3.	Jagdishpur Haldia Pipeline	876 km
4.	Dadri-Bawana-Nangal Pipeline	590 km
5.	Chhainsa-Gurgaon-Jhajjar- Hissar Pipeline	310 km

Authorizations have been granted to other entities for the following pipelines:-

a		
SI. No.	Name of the pipeline	Length of the pipeline
1.	Kakinada-Basudebpur-Howrah	1100 km
	Pipeline	
2.	Vijayawada-Nellore-Chennai	445 km
3.	Chennai-Tuticorin	670 km
4.	Chennai-Mangalore-Bangalore	660 km

A network of trunk gas pipelines is being laid by GAIL, as also other entities, connecting customers across the country to various sources of natural gas. A map depicting this is being enclosed. Thus a grid covering a large part of the country is evolving, which would connect customers in various parts of the country to the sources of gas.

#### Recommendation No. 6 (iii)

# **Gas Pipeline Policy**

The Committee note that Government has a proposal to announce Natural Gas Pipeline Policy which will inter-alia lay down the broad frame work for laying of transmission pipelines, gas trunk pipelines and inter-city pipelines. While the draft Pipeline policy has been prepared, the Committee are constrained the note that final policy has yet not been announced even though Secretary, Ministry of Petroleum and Natural Gas during his deposition before the Committee in September, 2006 had stated that the policy was expected to be issued within two weeks. As the proposed policy is aimed at facilitating open access for all players to the pipeline network on non–discriminatory basis, encourage more investment in this sector which in turn would help in speedy completion of current and future pipeline projects, Committee desire that Natural Gas Pipeline Policy should be announced without any further delay.

#### Reply of the Government

Government has notified the 'Policy for Development of Natural Gas Pipelines and City or Local Natural Gas Distribution Networks' on December 20, 2006. The policy has come into effect from December 22, 2006, the date of its publication in the Official Gazette.

# Recommendation No. 7

# Gas storage capacity

The Committee note that there is zero storage of natural gas in the country. In the event of any disruption in the supply of gas, Committee have been informed by GAIL that they supply gas which is there in the compressed form within the pipeline, called line pack or other option is use of liquid fuels both of which are not at all a satisfactory state of affairs.

As natural gas is stored underground in salt caverns/ depleted fields or in aquifers, Committee note that GAIL has started a feasibility study. Committee desire that GAIL should expedite completion of feasibility study and take steps for creation of storage capacity for natural gas for 2-3 weeks so that in the event of any energy deficit arising out of oil/ gas supply disruption, supply of gas to various consumers viz fertilizer/ power plants etc., is not disrupted.

# Reply of the Government

GAIL has envisaged setting up of commercial Natural Gas storage facilities along HVJ-DVPL pipeline and on the east coast near gas consumption centers. Discussions have been held with various parties having experience in the area of gas storage and necessary inputs have been taken for the project. GAIL has initiated activities for preparation of the Feasibility Report. The study will involve assessment of required storage capacity, selection of the best sites suitable for gas storage and optimal solution for construction of the same.

Further, MoP&NG constituted a Committee in October 2005 for preparation of Pre-feasibility Report/Detailed Feasibility Report for setting up of Strategic Natural gas storage facilities. The Committee comprised of members from OIDB, GAIL, DGH and EIL. The preparation of Pre-Feasibility Report has been taken up by OIDB for setting up of strategic Natural gas storage through EIL. The report is expected to be ready by September 2007.

# Recommendation No. 8 Gas distribution by GAIL

Committee note that at present Piped Natural Gas is being made available in certain localities in Delhi, Mumbai, Assam and Gujrat and GAIL intends to provide natural gas to another 10-11 cities through city gas distribution network in the next eight years. As a long-term measure, Committee have been informed that GAIL has identified 28 cities for implementation of city gas distribution project on the basis of most polluted cities identified by honorable Supreme Court and other cities close to GAIL pipeline network on the basis of business need and project viability. The Committee desire that GAIL should take all possible steps to achieve the objective of providing gas to 10-11 cities in the next eight years. Further, they should explore the feasibility of covering all the 28 cities identified by them in the next phase.

Regarding the compressed natural gas (CNG), the Committee note that the entire public transport system of Delhi today runs on CNG. The Committee however note that CNG distribution is not made available to other major cities such as Pune despite a Supreme court order requiring the start of CNG by 2006. The Committee recommend that GAIL should make efforts to see that CNG is made available to other major cities as well, as such a step will not only help in reducing the consumption of petrol which is a costlier fuel but also help in controlling the pollution of cities.

The Committee would like the GAIL authorities to expedite the setting up of interstate pipeline network in close vicinity of metropolitan cities and other industrially important centres of the states, and in suitable phases GAIL should prioritise the issue of making available CNG in the overall interests of rapid and inclusive growth of the economy.

#### Reply of the Government

Piped Natural Gas (PNG) is being presently supplied in the following cities and towns:-

Delhi, Mumbai, Agartala, Surat, Hazira, Junagam, Vasva, Mora, Damka, Bhatlai, Kawas, Rajgiri, Suwali, Icchapore, Ankleshwar, Bharauch, Vadodara, Ahmedabad, Vidyanagar, Anand, Morbi, Gandhinagar, Duliajan, Digboi, Dibrugarh, Moran, Naharkatiya, Sivasagar, Nazira, Simaluguri and Tinsukia.

Compressed Natural Gas (CNG) is being presently supplied to vehicles in the following cities:-

Mumbai, Thane, Mira-Bhayandar, Delhi, NOIDA, Vijayawada, Hyderabad, Kanpur, Lucknow, Agra, Agartala, Ahmedabad, Ankleshwar, Bharuch, Surat, Vadodara, Gandhinagar and Hazira.

GAIL and other entities have recently applied for authorizations for City Gas Distribution (CGD) projects in a large number of cities.

The Committee was earlier informed that GAIL has identified 28 cities for implementation of CGD Projects. These cities were identified on the basis of the most polluted cities, where CGD projects have to be implemented in view of Hon'ble Supreme Court's directions, and other cities, which are close to GAIL's pipeline network and are seen as business fit cases. As desired by the Committee, GAIL is taking all possible steps to achieve the objective of providing PNG and CNG to all the identified cities. The current status and expected target date for supply of CNG and PNG to the identified cities is enclosed.

Further, the detailed status of activities for CNG distribution in Pune is as follows:-

#### 1. The JV Partner:

GAIL and BPCL have formed Joint Venture Company, namely, Maharashtra Natural Gas Limited for implementation of City Gas Distribution project in Pune.

# 2. **Signing of JVA:**

JVA has been signed on 26.07.2004.

#### 3. **Incorporation of the Company:**

Joint Venture Company was incorporated on 13.01.2006.

#### 4. Market Survey:

Detailed Feasibility Report (DFR) study, including Market survey and demand assessment, has already been completed.

# 5. Land / RoU acquisition:

Identification of land for CNG stations and acquisition of RoU is under process.

### 6. Contribution towards equity:

Rs.10 crores (Rs. 5 crores each by GAIL and BPCL) has already been contributed.

#### 7. Engagement of Project Execution Agency:

Engineering and Project Management Consultant (EPMC) has been appointed and the job is being executed.

#### 8. Pipeline connectivity from gas supply line:

Supply of natural gas to Pune City Gate Station has been planned by GAIL as part of Dhabol Panvel Pipeline (DPPL) Project. The work is expected to be completed by the end of 2007.

#### 9. Expected Commissioning of Project:

It is expected that 1<sup>st</sup> CNG station would be commissioned and CNG supply would commence by 31.01. 2008.

The Committee has suggested that GAIL should expedite the setting up of inter-state pipeline network in close vicinity of metropolitan cities and other industrially important centers of states. Detailed information in this regard is submitted in the reply to Recommendation No. 6(ii). The developing network of trunk pipelines would facilitate availability of CNG in a much greater number of cities.

SI.	Name of	Name of JV /	Project Status					
No	City	Status of JV Formation	Gas Allocatio n (MMSCM D)	Market Survey & Demand Study	DFR	Pipeline Connectivity	project Implementati on Status	Target Date for supply of CNG
1.	Agra	Green Gas Limited	NIL	Carried out in 2002	Prepar ed in 2002	Available	1 CNG station	Already commission ed
2.	Lucknow	Green Gas Limited	0.1	Carried out in 2002	Prepar ed in 2002	Available	4 CNG station	Already commission ed
3.	Kanpur	Central U.P. Gas Limited	0.1	Carried out in 2002	Prepar ed in 2002	Available	3 CNG stations	Already commission ed
4.	Varanasi	Central U.P. Gas Limited	Nil	Carried out in 2002	Prepar ed in 2002	Proposed Jagdishpur – Haldia	To be taken up with implementatio n of Jagdishpur – Haldia	2010
5.	Pune	Maharashtra Natural Gas Limited	0.4	Carried out in 2002	Prepar ed in 2002	Feeder Pipeline is being laid as part of Dhabol Panvel Project. Target date of commissionin g -	Downstream project implementatio n activities being taken up by MNGL	2008
6.	Faridabad	Indraprastha Gas Limited	0.7 (includin g NOIDA, Gurgaon & Faridaba d)	Carried out in 2002	Prepar ed in 2002	Feeder P/L available	IGL can supply after clearance from State Govt.	-
7.	Patna	JV Partner to be finalized	NIL	Carried out in 2002	Prepar ed in 2002	Proposed Jagdishpur – Haldia	To be taken up with implementatio n of Jagdishpur – Haldia pipeline	2010
8.	Ahmedabad	MoU signed with HPCL on 16.11.2005; JVA under finalization	NIL	Carried out by HPCL	Carrie d out by HPCL	Pipeline available	HPCL is supplying CNG	Already available
9.	Sholapur	Maharashtra Natural Gas Limited	NIL	To be taken up	To be taken up	To be taken up	Implementatio n to be taken by MNGL after commissionin g in Pune	2008
10.	Hyderabad	Bhagyanagar Gas Limited	0.1	Carried out in 2003	Prepar ed in 2003	Proposed Kakinada- Uran Pipeline	Auto LPG is already being supplied.	Already available

11	Bangalore	MoU has been signed with BPCL on 22.12.2005	NIL	To be taken up	To be taken up	Proposed Kochi – Kanjirkkod- Mangalore- Bangalore Pipeline.	Implementation to be taken up after formation JVC and tie up of Gas.	2010
12	Kolkata	Signing of MoU under progress	Nil	To be taken up	To be taken up	Proposed Jagdishpur- Haldia Pipeline	To be taken up after commissioning of Jagdishpur-Hadia P/L	2009
13	Chennai	JV partner to be identified	Nil	To be taken up	To be taken up	Proposed Kakinada- Chennai Pipeline	To be taken up with commissioning of Kakinada-Chennai P/L by Reliance Energy Limited.	2010
14	Allahabad	Central UP Gas Limited (CUGL)	Nil	Carried out	To be taken up	Thulendi Phoolpur pipeline is already laid.	CUGL to take up the implementation.	2009
15	Bareilly	Central UP Gas Limited (CUGL)	0.05	Carried out	Carried out	Feeder Pipeline is available	CUGL to take up the implementation.	2007
16	Jhansi	Central UP Gas Limited (CUGL)	Nil	Carried out	To be taken up	Feeder pipeline is available	CUGL to take up the implementation.	2009
17	Mathura	Green Gas Limited (GGL)	Nil	Carried out	To be taken up	Pipeline available to up to IOCL Mathura Refinery	GGL to take up the implementation	2009
18	NOIDA	State Govt. of Uttar Pradesh issued NOC to Adani Energy Limited.	0.7 (including NOIDA, Gurgaon & Faridabad)	To be taken up	To be taken up	Pipeline available	-	-
19	Navi Mumbai	Mahanagar Gas Limited (MGL)	0.5 (Thane & Navi Mumbai)	To be taken up	To be taken up	To be taken up	MGL to take up the implementation	2007
20	Gwalior	Aavantika Gas Limited (AGL)	Nil	Carried out	To be taken up	Feeder pipeline available	AGL to take up the implementation	2007
21	Indore	Aavantika Gas Limited (AGL)	Nil	Carried out	Carried out	Jagoti-Pitampur Feeder Pipeline under execution	AGL to take up the implementation	2007
22	Ujjain	Aavantika Gas Limited (AGL)	Nil	Carried out		Feeder pipeline being laid	AGL to take up the implementation	2007
23	Rajamundry	Bhagyanagar Gas Lmited (BGL)	Nil	To be taken up	To be taken up	Feeder Pipeline available	BGL to take up the implementation	2008
24	Vijayawada	Bhagyanagar Gas Lmited (BGL)	Nil	Carried out	Carried out	Pipeline available	4 CNG Stations	Already Commossion ed
25	Rajkot	MoU has been signed with HPCL on 16.11.2005	Nil	Carried out	To be taken up	To be taken up	To be taken up by JVC	2007
26	Surendranag ar	MoU has been signed with HPCL on 16.11.2005	NII	Carried out	To be taken up	To be taken up	To be taken up by JVC	2007
27	Kota	MoU has been signed with HPCL on 16.11.2005	Nil	Carried out	Carried out	Pipeline available	To be taken up by JVC	2007

# Recommendation No. 10

#### **Gas Pricing Policy**

The Committee have been informed that in view of different sources from where gas is made available, i.e., through domestic production and imports in the form of LNG and pipeline gas, it is difficult to arrive at a uniform price of gas, sector-wise as well as source-wise. Thus, as on date, there is no direct regulation of prices for all gases other than administrative price mechanism regulated domestic gas produced by ONGC/OIL, which involves a limited volume of 55 MMSCMD. The Committee feel that for orderly growth of gas market in the country, it is imperative that clear-cut guidelines are issued for determination of gas price from different sources. The Committee note that a Committee has been set-up in the Ministry of Petroleum and Natural Gas, to come out with a transparent policy framework which will provide the basis and the guidelines for determination of gas price. The Committee desire that gas pricing policy be evolved on the basis of recommendation of this Committee so as to ensure that gas prices are fixed on a transparent basis.

#### Reply of the Government

At present, there are broadly two pricing regimes for gas in the country-gas priced under APM and non-APM or free market gas. The price of APM gas is set by the Government. As regards non-APM/free market gas, this could also be broadly divided into two categories, namely, imported LNG and domestically produced gas from JV fields. While the price of LNG imported under term contracts is governed by the SPA between the LNG seller and the buyer, the spot cargoes are purchased on mutually agreeable commercial terms. As regards JV gas, its pricing is governed in terms of the PSC provisions. At present, out of the total gas availability of around 96 MMSCMD in the country, around 53 MMSCMD is APM gas and 43 MMSCMD in non-APM gas (20 MMSCMD JV gas and 23 MMSCMD RLNG). APM gas, which comes from the existing fields of ONGC and OIL given to them on nomination basis by the Government, is on the decline; while it forms about 60% of the total gas available at present, its share is likely to come down to around 15-20% by 2011-12; while the quantities under RLNG and JV production will go up.

#### 1.1 **APM Pricing**

- 1.1.1 The Cabinet decided that the consumer price be revised to Rs.3,200/MSCM w.e.f. 1.7.2005 for the following categories of consumers. It was also decided that all the APM gas (estimated at around 55 MMSCMD then) will be supplied to only these categories.
  - a. Power sector consumers
  - b. Fertilizers sector consumers
  - c. Consumers covered under court orders
  - d. Consumers having allocations of less than 0.05 MMSCMD.

This increase was on an ad hoc basis and it was decided that the Tariff Commission would examine the issue of Producer price of natural gas.

- 1.1.2 It was decided that the price of gas supplied to small consumers and transport sector (CNG) would be increased over the next 3 to 5 years to the level of the market price. With effect from 06.06.2006, the APM gas price to small consumers and CNG sector has been increased by 20%, to bring it to Rs.3840 / MSCM.
- 1.1.3 It was decided that the gas price to the consumers, other than those stated in para 1.1.1 above, would be market determined.
- 1.1.4 The Tariff Commission (TC) has submitted its report and has recommended Producer price of Rs.3710/MSCM and Rs.4150/MSCM for ONGC and OIL respectively. TC has also recommended that the consumer price should be somewhat higher than the Producer price, looking at the substantial difference between the recommended Producer price and the price of market gas/alternative fuels. MoP&NG is examining the recommendation of TC and would be revising the prices of natural gas shortly.

# 1.2 <u>Pricing of gas under Pre-NELP Production Sharing Contracts – PMT</u> <u>and Ravva JV gas</u>

- 1.2.1 Production Sharing Contracts (PSCs) were executed by GOI with Ravva consortium and PMT consortium on October 28, 1994 and December 12, 1994 respectively.
- 1.2.2 In terms of PSC for PMT, the ceiling prices are to be revised to 150% of 90% F.O. basket (average of the preceding 18 months), after 7 years from the date of first supply. Thus, the revision was due w.e.f. June 2004 for Tapti and February 2005 for Panna Mukta. The PMT gas prices have since been revised.

While PMT sells 4.8 MMSCMD of gas directly, the balance quantity of about 6 MMSCMD is brought by GAIL, and GAIL paid @ \$3.86/MMBTU during 2005-06 and is paying @ \$4.75/MMBTU w.e.f 1.4.06 based on counter-matching the price offered by prospective consumers in response to the bid floated by the consortium. However, this gas is being supplied by GAIL to power and fertilizers sector consumers along HBJ pipeline at APM price and adjustments are being made through the gas pool account mechanism in terms of the pricing order of 20.6.2005.

1.2.3 In case of Ravva, the revision of ceiling price is due after 5 years from the date of supply and the revised ceiling price is to be negotiated between the Buyer and the Seller in good faith. The price revision for Ravva was due w.e.f. April 2002. The price revision has been effected w.e.f. July 1, 2005 and GAIL has been paying @ \$3.50/MMBTU since then. The share of this gas going to APM consumers is being charged by GAIL at APM price, with adjustment through gas pool account mechanism. The total quantity of this gas is around 1 MMSCMD.

1.2.4 As regards 0.9 MMSCMD Ravva Satellite gas, it was priced at \$3.3/MMBTU till September 18, 2006. The price has been revised to \$4.3/MMBTU in terms of the provisions of PSC. Since this gas is not under APM allocation, GAIL recovers the full price from the consumers.

#### 1.3 **Pricing of gas with reference to NELP Provisions:**

As regards the gas from NELP fields, the price of natural gas for sale to consumers shall be in accordance with the PSC provisions. It is to be fixed at arm's length price as per the provisions of PSC under NELP. Prior approval of MoP&NG has to be obtained for the formula or the basis on which the price is fixed.

The role of Government is to approve the valuation of gas for the purpose of determining Government take. In order to provide transparency in approving valuations, the Government had formed a Committee to formulate transparent guidelines for approving natural gas price formula / basis for giving Government approval under the Production Sharing Contracts.

The Committee, which was constituted by the Ministry in August 2006, was headed by Joint Secretary & Financial Advisor, Ministry of Petroleum & Natural Gas and had DG, DGH and concerned Joint Secretaries as other members.

The Committee has recommended that in all situations where a price discovery through competitive bidding is possible, there should be no need to apply any other principle for valuation of gas. Once a market-determined price has been discovered between the suppliers and customers through a transparent competitive bidding process, there should be no need for the Government to interfere with the same.

Further, the Committee has said that in the absence of a market determined price discovered through a transparent bidding process, where valuation of gas has to be necessarily done by Govt., it may be done, based on the price in the most recent competitively determined contract in the region duly indexed to the present. Indexation is to be done as per provisions of the market determined reference contract, as each market determined contract sets out various terms and conditions of supply, including the price review mechanism.

The Committee has noted that each contract, normally, has a price review clause every 5 years. If the price stands reviewed as per the reference contract that may become the new reference price. For interim periods, the Committee has recommended that indexation may be linked to percentage increase in price of cheapest liquid fuel, i.e., Furnace Oil (FO), which is not only the cheapest liquid fuel but has also shown least price volatility in recent years.

The Committee was of the view that the above valuation may be applied only when actual supply has commenced and the price has not been discovered through the market mechanism. However, if the actual price, at which any producer supplies to any consumer, is higher than the one arrived at by the above methodology, then the higher price is to be reckoned for Govt. take. It would be ideal if the Committee's approach had never to be applied, but if the eventuality does arise, DG DGH and Director, PPAC will do the calculations based on Committee's recommendations. It would be DGH's responsibility to ensure that the Producer remits the Government's take accordingly.

#### 1.4 **Pricing of R-LNG**:

1.4.1 A contract was signed with RasGas, Qatar for supply of 5 MMTPA LNG (equivalent to about 18 MMSCMD) by Petronet LNG Limited and supplies were commenced from April 2004. The price for LNG has been linked to JCC crude oil under an agreed formula. However, the FOB price for the period up to December

2008 has been agreed at a constant price of \$2.53/MMBTU. This price translates to RLNG price of \$3.86/MMBTU ex-Dahej terminal.

1.4.2 In order to make the price of RLNG affordable, it has been decided to pool the prices of 5 MMTPA RLNG presently being imported from Qatar with the price of new RLNG being imported on term contract basis. This would ensure supply of RLNG to both existing and new customers at a non-discriminatory uniform pooled price.

### **Recommendation No.11**

#### Regulator

The Petroleum & Natural Gas Regulatory Board Act, 2006, which, interalia, stipulates for setting up of a regulatory Board Authority for downstream operations like transportation, distribution, marketing, processing, storage etc. of natural gas was notified by Government in April, 2006. The Committee are constrained to note that though more than seven months have elapsed since the notification was issued, the Petroleum & Natural Gas Regulatory Board has not yet been established. The Committee have been informed that a Search Committee for selecting Chairperson and Members of the Board has been notified on 31.08.06. The Committee desire that Ministry of Petroleum & Natural Gas should urge the Search Committee to submit their recommendations expeditiously and based on their recommendation Ministry should take steps to constitute the PNGRB and appoint regulator without any further delay.

### Reply of the Government

The Petroleum & Natural Gas Regulatory Board has been constituted w.e.f. 25-6-2007 with the following composition:-

**Chairman** - Shri L. Mansingh.

Members - 1) Shri B.S. Negi

- 2) Shri L.K. Singhvi
- 3) Smt. Sudha Mahalingam
- 4) Shri M.B. Lal (Technical Appellate Tribunal)
- 5) Dr. Dange (Legal)

## Recommendation No. 12

#### Safety Measures

The Committee have been informed that GAIL has always accorded highest priority to maintenance of highest standards of safety and continue to strive for zero accident, in all its industrial installations. In recognition of its efforts, GAIL has earned several safety awards and laurels from various national and international bodies.

Despite all the laudable steps that have been taken by GAIL, Committee note that during the last three years number of accidents have increased year after year. While in 2003 only one incident of fire due to gas leakage in Gandhar occurred, in the year 2004, three incidents of fire and electrocution took place. In 2005 number of such incidents increased to four. Even in the current year, i.e., 2006 already three accidents have occurred. Although GAIL (India) Limited has made tall claims about their safety, yet they have not been able to achieve zero accident rate. The Committee would like to emphasise that accidents are not only harmful to the workers and the people nearby but also cause damage to the assets of the company. The Committee therefore recommend that GAIL should further strengthen its safety measures and ensure their strict compliance so that the intended objective of achieving zero accident rate in all its units is achieved.

# Reply of the Government

GAIL continues to strive for Zero accidents in all its units. Its emphasis on safety starts right from the planning stage and continues through design, construction, operation & maintenance. GAIL has established a structured Safety Management System which is being followed at all installations. GAIL is committed to achieve Zero accidents through continuous improvement and strengthening of it existing safety system and measures. In this regard, notable initiatives of the Company taken recently are as follows:

- Implementation of Enterprise Resource Planning (ERP) all across GAIL installations.
- (a) wherein the work permit system, electrical lockout and job cards have been made on line.
- (b) the environment, health & safety module of SAP has been implemented in

major work centers, wherein the incident/accident reporting/investigation, internal safety audits and compliance and occupational health examination have been made on line.

- 2. The near miss awareness and reporting from the work centers have increased manifold due to rigorous follow up & reporting of near miss incidents by work centers on regular basis.
- Six monthly workshops on safety and related topics are being organized at the work centers.
- 4. CMD's rolling trophy for the best HSE performer during the year, amongst all GAIL units/process plants, has been introduced to generate competitiveness and further enhance the safety performance.

These safety measures shall help in bringing down the accident rate and finally achieve/attain the Zero accident target. As per Table -1, the no of accidents/incidents have already come down from 4 in 2005 to 3 in 2006.

Apart from this, existing and in place Safety measures, mentioned below, are being adhered and followed strictly:-

- 1. Review of safety measures at the design stage.
- Safe construction practices during execution of the project.
- 3. Pre-commissioning audit by OISD.
- 4. Hazop and risk analysis of plants & pipelines.
- 5. Emergency Response Plan established for all major installations.
- 6. Mutual aid during emergency.
- 7. Certification of OHSAS 18001.
- 8. Operation & maintenance manuals with proper safety instructions.
- 9. Availability of properly maintained safety data sheet.
- 10. Conducting quarterly internal safety audits.
- 11. External Safety audit by Oil Industries Safety Directorate.
- 12. External Safety audit through reputed national/ international agency.
- 13. Effective telecommunication system through optical fibre, microwave, HF, VHF, paging and cellular telephones.
- 14. Supervisory control and data acquisition (SCADA) of various parameters of the pipeline and transmitting data to Master Control Centre (MCC) for effective monitoring on real time basis.
- 15. Remote operation of Sectionalizing Valves (SV) provided in the pipeline from MCC in cases of emergency.
- 16. Emergency shutdown of the plants (automatic/ manual).
- 17. Availability of round-the-clock fire tenders and fire fighting crew at all installations.
- 18. Work Permit System.
- 19. Training of employees on safety issues including personnel safety on regular basis.
- 20. Conducting Safety Workshops.
- 21. Review by the top management on safety matters during meetings.
- 22. Incident investigation to identify the root cause and implement corrective

- measures to prevent recurrence.
- 23. Adherence to established Management of Change procedure for any modifications in the plants.
- 24. Established system for Control of defeat and reliability of critical systems and devices.
- 25. Effective monitoring of Third Party Services.

TABLE -1

Year	No. of accidents/ causalities	Death	Injury	Compensati on	Cause	Preventive Measure Taken
2003	Fire due to gas leak in Gandhar Dhuwaran P/L on 26.4.03	Nil	Nil	NA	Gas leak from one of the flanges near pig receiving barrel caused fire	Maintenance of Pig barrels valves strengthened. History cards maintained.
2004	Electrocution at LPG Plant Vaghodia on 12.3.04	1 contract worker	Nil	Refer Note 1	Electrocution while checking bus bar of isolated panel	Contractor to ensure safety briefing given to all workers      Supervision done by GAll executives      Electrical lockout permit system reviewed.
	Electrocution at construction site on Agartala on 06.07.04	1 contract worker	Nil	Refer Note 1	Electrocution	Temporary switch boards/ panels protected from rain water      PPE use ensured      Safety briefing given to workers at site
	Fire incident in LPG Phase I Vijaipur on 06.07.04	Nil	Minor burn injury of 1 GAIL Employee	Rs.37,143	Malfunctioning of the igniter of pilot burner leading to flash fire	<ol> <li>Job to be covered under hot work permit.</li> <li>Jobs performed at odd hours should be approved by General Manager</li> <li>Job to be carried in presence of GAIL executive</li> </ol>
2005	Fire incident at Pata	Nil	Burn injury to	Rs.92,800	Leakage of Cyclohexane	Proper risk assessment done

	T =	I	1	T	T	T
	Petrochemical complex on 29.04.06		01 GAIL employee			before any hazardous job
						2. Open hydrocarbon loops avoided as far as possible. If at all unavoidable job to be carried out as per SOP and with due approval of General Manager.
						3. Jobs involving fire hazards, if done at odd hours should be with the approval of GM/OIC.
						4. Procedures established for all non routine jobs
	Minor fire due to gas leak in DESU-Maruti P/I on 10.08.2005	Nil	Nil	NA	Gas leak from pipeline puncture caused by localized heating by passing overhead 30 KV surge diverter cable.	A study carried out and after initial study 11 KV cable was taken away by about 2 feet form pipeline and 6 inches thick PCC slabs were positioned in between the pipeline and cable at the affected location
	Non fatal accident of fall of employee from monkey ladder of furnace in GCU Pata on 11.9.2005	Nil	1 GAIL employee	Rs. 1,25,000	Fall from height	All access/ ladders in the plant area audited for safety. System of periodic checking initiated for entire plant.
	Non fatal accident of fall of contract worker from rooftop of C&P Cement Godown Pata on 30.09.2005	Nil	1 contract employee	Refer Note 1	Fall from height	Stringent use of safety belt for work at height
2006	Minor fire/gas leak in 8" diameter Natural	Nil	Nil	Nil	Passing of fault current through pipeline originated	1. A survey was done to locate erected electrical poles in close

Gas Pipeline at Ferozabad on 19.08.06				from 11 KV overhead conductor puncturing pipeline and leading to fire	proximity to gas pipelines.  2. Electrical poles shifted to distance from pipeline. Where ever, not feasible insulation provided between pipelines and poles.
Flash fire in HT panel injury to one employee at IPS, Mansarampura on 24.08.2006	Nil	Burn injury to one GAIL employee (no disable ment)	Claim lodged with insurance company (approx. Rs30,00	Exposure to Flash fire in HT panel while isolation / maintenance	1.Strict implementation of electrical isolation procedure  2.Provision of rubber mats on floor while working on such panels
Minor Fire /gas leakage in 2' diameter NG Firozabad onl1.09.2006	Nil	Nil	Nil	Passing of fault current through pipeline originated from 11 KV overhead conductor puncturing pipeline and leading to fire	Close     proximity electrical     poles shifted away      Insulation     provided between     pipeline and     electrical poles,     wherever shifting     was not feasible

### CHAPTER III

# RECOMMENDATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN VIEW OF GOVERNMENT'S REPLIES

#### **Recommendation No.9**

## Shortage of rich gas to HVJ based plants.

The Committee have been informed that in order to ensure rich gas supplies to GAIL's processing plants along HVJ pipelines, rich LNG was sourced from Qatar and currently rich LNG from Dahej is entering into HVJ system. However, in view of Ministry of Petroleum & Natural Gas's decision permitting ONGC for setting up of C2-C3 extraction plant at Dahej which is expected to commence from 2009 onwards, GAIL have informed that extraction of rich gas by ONGC at Dahej would lead to shortage of rich gas to their HVJ based plants and their investment of Rs. 4000 crores on the gas processing facilities along the HVJ system would stand exposed to the threat of turning into non-performing assets.

The Committee desire that Ministry of Petroleum & Natural Gas should hold consultation with representatives of ONGC and GAIL and take remedial steps so as to ensure that GAIL's processing plants along HVJ pipeline don't face shortage of rich gas.

#### **Reply of the Government**

New gas finds are expected to be made in the blocks awarded under the New Exploration Licensing Policy (NELP). The Liquefied Natural Gas (LNG) infrastructure in the country is being expanded, which would make it possible to import large quantity of LNG in the country. Depending upon the availability of C2+ fractions in the gas thus available, GAIL would be able to optimally utilize its processing plants. GAIL has been advised to take expeditious action to tie-up gas sources for this purpose.

## **CHAPTER IV**

RECOMMENDATIONS IN RESPECT OF WHICH REPLIES OF GOVERNMENT HAVE NOT BEEN ACCEPTED BY THE COMMITTEE

#### Recommendation No. 2

#### **ORGANISATIONAL SET-UP**

The Committee note that GAIL's activities have increased manifold since its setting up in 1984. The Committee have been informed that the diverse business profile of Company, such as exploration & production, city gas marketing etc., has warranted a realignment of portfolio among various Directors which include creation of new directorates and accordingly a proposal for creation of the position of Director (Operations) has been put up before the HR Committee, a sub-committee of Board of Directors. The Committee are unable to understand the reasons due to which no decision has yet been taken by the HR Committee on the said proposal. The Committee desire that the proposal for creation of Director (Operations) be cleared expeditiously and steps be taken to appoint Director (Operations) with due promptitude.

The Committee are also constrained to note that Ministry of Petroleum and Natural Gas have not communicated any decision on GAIL's proposal for requirement of additional independent Directors on its Board despite the fact that GAIL has taken up the matter with them number of times. The Committee need not emphasise the imperative need of full complement of Directors on the Board of GAIL for the effective and efficient functioning of its various activities. They therefore recommend that Ministry of Petroleum & Natural Gas should take immediate decision on GAIL's proposal for appointment of additional Directors. The Committee also recommend that a comprehensive review of organizational setup of GAIL may be undertaken in view of its fast expanding role and responsibility in meeting the energy requirements of the country.

#### Reply of the Government

The proposal for creation of position of Director (Operations) was submitted to HR sub-committee of Board of Directors of GAIL. It was proposed that in view of the diverse business profile of GAIL, realignment of portfolios among various directorates(s), including creation of the position of Director

(Operations), is needed. The proposal is under active consideration of the HR sub-committee.

Regarding appointment of Independent Directors on the Board of GAIL, the Search Committee of the DPE has recently recommended some names for the post of Independent Directors on the Board of the GAIL (India) Limited. The recommendations of the Search Committee are being examined in the Ministry.

# **Comments of the Committee**

Please refer paragraph no. 5 of Chapter I of the Report.

## CHAPTER V

# RECOMMENDATIONS IN RESPECT OF WHICH FINAL REPLIES OF GOVERNMENT ARE STILL AWAITED

#### Recommendation No. 5

### The Role of GAIL in India's Gas Security

In view of steep hike in prices of crude oil in international market and resultant strain on foreign exchange reserves of the country, it is imperative that concerted efforts are made to augment the supply of gas which is relatively cheaper and cleaner fuel to meet the energy requirements of the country. The Committee note that that at present natural gas meets only 8% of the energy requirement of our country and its share is projected to grow up to 20% in the next twenty years i.e. by the year 2026. To reduce the wide gap of 40% between demand and supply of natural gas and to augment the share of natural gas up to 20% in the energy sector in the next twenty years, the Committee note that a multi-pronged strategy has been adopted by GAIL which include participation in NELP blocks; setting up of LNG terminals to import LNG; bringing of gas by transnational pipelines; extraction of gas by use of clean coal technology etc. The above-mentioned multi-pronged strategy adopted to ensure the gas security of India has been dealt with as under:

The Committee note that Government has taken steps for importing gas through transnational pipelines from gas rich countries, namely, Iran, Myanmar and Turkmenistan and the three pipeline proposals are Iran-Pakistan-India pipeline, Turkmenistan-Afghanistan-Pakistan-India pipeline and Myanmar-India pipeline. As regards Iran-Pakistan-India pipeline, Committee note the matter has been under discussion with Iran for the last 2 ½ years and the only issue which is pending resolution pertains to price at which gas is to be sold by Iran to Pakistan and India. The Committee were informed by Secretary, Ministry of Petroleum and Natural Gas during evidence on 26<sup>th</sup> September, 2006 that he was confident that pricing issue would be resolved over the next two months. The Committee hope that the stalemate with regard to gas price issue would be resolved soon.

As regards Turkmenistan - Afghanistan - Pakistan India (TAPI) Pipeline project, the Committee note that Asian Development Bank (ADB) which is the technical sponsor of the TAPI pipeline project has been requested to go to

Turkmenistan and make survey about the adequacy of reserves to supply gas to India, and to give the necessary certification. The Committee have been further informed that discussion will start only after the certification is given by ADB to India. The Committee desire that the matter may be vigorously pursued with ADB and based on their certification steps may be taken to negotiate with Turkmenistan for supply of gas.

With regard to gas from Myanmar, the Committee were informed that Myanmar has floated an international bid for the two blocks, and India has also put in the bid, and if that bid is acceptable to Myanmar, then the negotiations would reach the final shape. The Committee desire that GAIL/Ministry should play more proactive role and make all out efforts to bring in natural gas into India through transnational pipelines from Iran, Myanmar and Turkmenistan.

# Reply of the Government

## Iran-Pakistan-India (IPI)

With regard to Iran-Pakistan-India (IPI) pipeline project, six trilateral meetings between Iran, Pakistan and India have been held. The issue of price of natural gas has not been resolved so far. During the 4th tripartite meeting held in Tehran on January 24 & 25, 2007, a gas pricing formula regarding pricing of gas at Iran-Pakistan border was agreed between Iran and Pakistan sides, subject to approval from the respective Governments. The Indian side agreed to respond to the pricing formula. India conveyed to the Iranian side, vide letter dated 28.2.2007, that total price payable at India-Pakistan border would also depend on transportation cost and transit fees payable by India to Pakistan for passage of gas through Pakistan; as there was no clarity on these, it was not possible for India to decide regarding the total price implication. Subsequently, Iran demanded price escalation in the 5<sup>th</sup> Tripartite JWG meeting held at Tehran during May 27-30, 2007, which both India and Pakistan disagreed with. The 6th Tripartite meeting was held in New Delhi on June 28-29, 2007, in which the issues relating to gas price review clause were discussed. Discussions are also being held amongst the participating countries on issues relating to gas availability from dedicated fields and development plan, delivery point for gas supply to India, governing law, GSPA related issues, etc. It was decided to carry forward the discussions to the next round of meetings for resolution of some of the contentious issues.

# Turkmenistan-Afghanistan-Pakistan (TAP)

With regard to Turkmenistan-Afghanistan-Pakistan (TAP) project, first Technical Working Group meeting was held at Ashgabat on April 17-18, 2007, which India attended. For India to join the project, inter – Governmental Framework Agreement signed between Turkmenistan, Afghanistan and Pakistan has to be amended. Draft of the revised Framework Agreement has been received. The draft Framework Agreement is under examination in consultation with the concerned Ministries.

#### Myanmar-India Pipeline

With regard to Myanmar-India pipeline, India has made consistent efforts to source gas from A1 and A3 blocks in Myanmar. The then Minister (P&NG) participated in a trilateral Ministerial meeting between the Oil Ministers of Bangladesh, Myanmar and India in January 2005 at Yangon, Myanmar. In pursuance of the trilateral Joint Press Statement released after that meeting, a Techno-Commercial Working Committee (TCWC) of representatives of the three countries was constituted. The first meeting of the TCWC was held in Yangon on February 24 and 25, 2005. The TCWC prepared a draft MoU to be signed by the three Oil Ministers after the approval of their respective Governments. However, the MoU could not be approved on account of differences between India and Bangladesh, as Bangladesh sought to raise certain bilateral issues in the trilateral MoU.

In view of the above, India pursued the alternative option of a pipeline from Myanmar through North-Eastern States of India. GAIL completed a Detailed Feasibility Report for this pipeline, for evacuating Myanmar gas to India through the north-eastern states. The pipeline was projected to be routed through Mizoram, Assam, West Bengal and Bihar, with a pipeline length of 1575 km within the Indian territory till Gaya in Bihar.

Subsequently, Myanmar invited bids for selling natural gas from A1 and A3 offshore blocks by the pipeline route. In response, GAIL submitted its bid in September 2006. Myanmar authorities later informed that the price quoted by all the bidders did not meet their expectation. Subsequently, Myanmar invited bids for sale of gas from these blocks through LNG route. This bid was submitted by

GAIL on December 4, 2006. The bids received were also not acceptable to Myanmar. However, in a meeting held in February 2007 between Myanmar Government and PetroChina, Myanmar Government decided that the gas from A1 and A3 blocks would be sold to China through the pipeline route. This development was conveyed to the consortium partners by Myanmar Government during a meeting held at Nay Pyi Taw (NPT) on March 16, 2007. During this meeting, GAIL impressed upon the other partners and Myanmar Government that GAIL's pipeline offer was still the most competitive and offered optimum value for them due to proximity of India to these fields. However, Myanmar Government stuck to their decision to sell the gas to China.

#### **Comments of the Committee**

Please see paragraph no. 8 of Chapter I of the Report.

# Recommendation No. 5 (iii)

## **Underground Coal Gasification**

The Committee note that underground coal gasification is a potential economic means for extracting gas from deep seated and /or isolated coal/lignite deposit resources which may not be amenable to conventional physical extraction economically. As per estimates of ONGC, the recoverable energy from Mehsana-Ahmedabad block with coal reserves of 63 billion tonnes in the form of gas is estimated to be equivalent to 15,000 billion cubic meters (BCM) of natural gas. Considering vast unexplored deposits of coal where conventional mining methods are not feasible, it is imperative that underground coal gasification process is used to extract gas, which would go a long way in meeting our energy requirements. The committee note that GAIL has entered into an agreement with agencies, which are competent in coal gasification, and is in the process of identifying 4-5 blocks in different parts of the country. The Committee desire that this exercise should be completed within a time frame and work pertaining to extraction of gas through UCG be started expeditiously.

## **Reply of the Government**

The technology is for production of synthesis gas from the In situ Lignite gasification project. GAIL has signed an MoU with Government of Rajasthan to

set up a pilot project at Barmer. It is planned to be an Integrated Gasification Combined Cycle (IGCC) plant of 5 MW power capacity.

GAIL has signed an MoU with M/s Ergo Exergy Technologies Inc., Canada, who are technology providers and leaders in the field. GAIL is in the process of signing a General License Agreement with M/s Ergo Exergy Technologies Inc. for the project. Under this, Site Selection study and Prefeasibility study would be carried out for establishing the lignite potential at site before taking up the pilot gasification project.

### **Comments of the Committee**

Please see paragraph no. 11 of Chapter I of the Report.

New Delhi 26 November, 2007 5 Agrahayan, 1929 (S) RUPCHAND PAL Chairman Committee on Public Undertakings

# MINUTES OF THE 12<sup>th</sup> SITTING OF THE COMMITTEE ON PUBLIC UNDERTAKINGS HELD ON 26<sup>th</sup> NOVEMBER, 2007

The Committee sat from 1600 hours to 1620 hours.

#### **PRESENT**

#### Chairman

#### **Shri Rupchand Pal**

#### Members, Lok Sabha

- 2 Shri Ramdas Bandu Athawale
- 3 Smt. Sangeeta Kumari Singh Deo
- 4 Shri Francis K. George
- 5 Dr. Vallabhbhai Kathiria
- 6 Ch. Lal Singh
- 7 Shri Shriniwas Patil
- 8 Shri Kashiram Rana

## Members, Rajya Sabha

- 9 Shri Ajay Maroo
- 10 Shri Pyarimohan Mohapatra
- 11 Shri K. Chandran Pillai

#### **Secretariat**

1	Shri S.K. Sharma	Additional Secretary
2	Shri J.P. Sharma	Joint Secretary
3	Smt. Anita Jain	Director
4	Shri N.C. Gupta	Deputy Secretary
5	Shri Ajay Kumar	Deputy Secretary-II

- 2. XXXXX XXXXXX XXXXXX XXXXXX
- 3. Then, the Committee took up for consideration the draft Action Taken Report on the recommendations contained in the 17<sup>th</sup> Report of the Committee on Public Undertakings pertaining to GAIL(India) Limited. The Committee adopted the Report without any changes.
- 4. XXXXX XXXXX XXXXX XXXXX
- 5. The Committee authorized the Chairman to finalize the Reports for presentation.
- 6. The Committee then adjourned.

# <u>APPENDIX II</u>

(*Vide* para 3 of the Introduction)

Analysis of the Action Taken by Government on the recommendations/ observations contained in the Seventeenth Report of the Committee on Public Undertakings (Fourteenth Lok Sabha) on "GAIL (India) Limited – A Comprehensive Examination".

I	Total number of recommendations	18
II	Recommendations that have been accepted by the Government [vide recommendations at Sl. Nos. 1,3(i), 3(ii), 3(iii), 4, 5(ii), 6(i), 6(ii), 6(iii), 7,8,10,11 and 12.	14
	Percentage of total	77.8%
III	Recommendation which the Committee do not desire to pursue in view of Government's replies [vide recommendation at SI. No. 9	1
	Percentage of total	5.6%
IV	Recommendations in respect of which replies of the Government have not been accepted by the Committee (vide recommendations at SI. No. 2	1
	Percentage of total	5.6%
V	Recommendations in respect of which final replies of Government are still awaited Sl.No. 5(i) and 5(iii)	2
	Percentage of total	11%