

C.P.U. NO. 903

SEVENTEENTH REPORT

COMMITTEE ON PUBLIC UNDERTAKINGS

(2006 - 2007)

( FOURTEENTH LOK SABHA )

GAIL(INDIA) LIMITED- A COMPREHENSIVE EXAMINATION

MINISTRY OF PETROLEUM & NATURAL GAS



Presented to Lok Sabha on 15 .12.2006

Laid in Rajya Sabha on 15.12.2006

LOK SABHA SECRETARIAT

NEW DELHI

December 2006/Agrahayana 1928(S)

## CONTENTS

	<b>Page No.</b>
Composition of the Committee (2006-07)	(iii)
Introduction	(v)
List of abbreviations	(vii)

### **Part A** **REPORT**

<b>1. Introduction</b>	<b>1</b>
Historical Background and present activities	
<b>2. Organisational set up</b>	<b>6</b>
<b>3. Performance of the Company</b>	<b>9</b>
(i) Project Appraisal	
(ii) Financial performance of the Company	15
(iii) Capacity utilisation	19
<b>4. Gas exploration by GAIL</b>	<b>24</b>
<b>5. The Role Of GAIL In India's Gas Security</b>	<b>30</b>
(i) Import of gas through transnational pipelines.	32
(ii) LNG (Liquefied Natural Gas)	37
a) Import of LNG	37
b) Setting up of LNG terminals.	39
(iii) Underground coal gasification.	42
<b>6. Gas Transmission By GAIL</b>	<b>45</b>
(i) Decline in percentage share of GAIL in natural gas transmission.	45
(ii) National Gas Grid	47
(iii) Gas pipeline Policy	49
<b>7. Gas Storage Capacity</b>	<b>52</b>
<b>8. Gas distribution by GAIL</b>	<b>54</b>
(i) Distribution of Piped Natural Gas to Households	54
(ii) Supply of CNG to vehicles in cities	56
<b>9. Shortage of Rich Gas to HVJ Based Plants</b>	<b>58</b>
<b>10. Gas Pricing policy</b>	<b>61</b>
<b>11. Regulator</b>	<b>64</b>
<b>12. Safety Measures</b>	<b>66</b>

### **Part B**

Conclusions /Recommendations of the Committee	72
---	----

### **Appendix**

Minutes of the sittings of Committee on Public Undertakings	99
(i)	

**COMMITTEE ON PUBLIC UNDERTAKINGS**  
**(2006 – 2007)**

**CHAIRMAN**

Shri Rupchand Pal

**MEMBERS LOK SABHA**

2. Shri Ramesh Bais
3. Shri Manoranjan Bhakta
4. Shri Gurudas Dasgupta
5. Smt. Sangeeta Kumari Singh Deo
6. Dr. M. Jagannath
7. Shri Suresh Kalmadi
8. Dr. Vallabhbai Kathiria
9. Smt. Praneet Kaur
10. Shri Shriniwas Patil
11. Shri Kashiram Rana
12. Shri Mohan Rawale
13. Shri Ramjilal Suman
14. Shri Bagun Sumbrui
15. Shri Ram Kripal Yadav

**MEMBERS RAJYA SABHA**

16. Shri Rishang Keishing
17. Shri Ajay Maroo
18. Shri. K. Chandran Pillai
19. Shri Shahid Siddiqui
20. Shri Prof. Ram Deo Bhandary
21. Shri Pyarimohan Mohapatra
22. Shri Dinesh Trivedi

**SECRETARIAT**

- |    |                   |                         |
|----|-------------------|-------------------------|
| 1. | Shri J.P. Sharma  | Joint Secretary         |
| 2. | Shri N.C. Gupta   | Under Secretary         |
| 3. | Shri Bala Guru G. | Sr. Executive Assistant |

## INTRODUCTION

I, the Chairman, Committee on Public Undertakings having been authorised by the Committee to present the Report on their behalf, present this Seventeenth Report on GAIL(India) Limited.

2. The Committee took evidence of the representatives of GAIL(India)Limited on 23<sup>rd</sup> August, 2006 and the representatives of the Ministry of Petroleum and Natural Gas on 26<sup>th</sup> September, 2006. The Committee on Public Undertakings (2006-07) considered and adopted the Report at their sitting held on 12<sup>th</sup> December, 2006.

3. The Committee wish to express their thanks to the Ministry of Petroleum and Natural Gas, and GAIL (India) Ltd. for placing before them the material and information they wanted in connection with examination of the subject. They also wish to thank in particular the representatives of the Ministry of Petroleum and Natural Gas, who gave evidence and placed their considered views before the Committee.

4. They would also like to place on record their sense of deep appreciation for the invaluable assistance rendered to them by the officials of the Lok Sabha Secretariat attached to the Committee.

**New Delhi**  
**15 December, 2006**  
**24 Agrahayana, 1928(S)COMMITTEE ON PUBLIC UNDERTAKINGS**

**RUPCHAND PAL**  
**CHAIRMAN**

### **List of Abbreviations**

Natural Gas:	Mixture of hydrocarbons, consisting of Methane, Ethane, Propane, Butane, etc.
C1:	Methane
C2:	Ethane
C3:	Propane
C4:	Butane & other heavier hydrocarbons
Lean Gas:	C1 & C2 (i.e.)Methane and Ethane used as feedstock for fertilizer industry.
Rich Gas:	C3 & C4 etc. (i.e.) Propane, Butane etc. used in production of LPG.
MMSCMD:	Million Standard Cubic Metres of Gas per day. (Standard unit for Volume of Natural gas).
LNG:	Liquified Natural Gas (i.e.) Gas Liquified at -160 <sup>0</sup> c (LNG is imported from Qatar through special tankers /ships).
R-LNG:	Re-gasified LNG(Re-gasification of LNG is done at Hazira & Dahej)
APM:	Administered Pricing Mechanism
PNG:	Piped Natural Gas (Natural Gas supplied to households).
CNG;	Compressed Natural Gas (Used as fuel for bus/automobiles transport).
KG:	Krishna-Godavari Basin (Newly discovered huge gas field in Andhra).
JV:	Joint Venture
E & P:	Exploration & Production
PNGRB:	Petroleum & Natural Gas Regulatory Board.
GSPL	Gujarat State Petroleum Corporation
IGL:	Indraprastha Gas Limited (GAIL is a JV partner in IGL).
MGL:	Mahanagar Gas Limited (GAIL is a JV partner)
HVJ:	Hajira – Vijaipur – Jagdhispur (Principal Gas Pipeline of India)
PLL:	Petronet LNG Limited (Principal LNG importing company, in which GAIL is a JV partner)
GAILTEL:	Gail Telecommunication.
NELP:	New Exploration & Licensing Policy
CGD:	City Gas Distribution
MMTPA:	Million metric tonnes per annum
GSA:	Gas Sales Agreement
TSA:	Term Sheet Agreement
RIL:	Reliance Industries Limited (Domestic private player in Natural gas business).
Mou	Memorandum of Understanding
LPG	Liquefied Petroleum Gas
HDPE	High Density Poly-Ethylene
PMT	Panna-Mukhta-Tapti
VSPL	Vizag Secunderabad LPG pipeline
UCG	Underground Coal Gasification
ISGG	Inter-State Gas Grid

## **INTRODUCTION**

### **I. Historical background and present activities**

1.1. The Gas Authority of India was formed on 16<sup>th</sup> August 1984, with an authorized capital of Rs 1000 crore and paid up capital of Rs.845.32 crore. The main objective and functions of GAIL are as under:

- (i) To create necessary infrastructure for transportation, processing and distribution of natural gas;
- (ii) To plan, design and construct pipelines, distribution systems and fractionation facilities for extraction of LPG and C2/C3;
- (iii) To operate and maintain the systems to be taken over from ONGC/ OIL as well as facilities to be set up by it; and
- (iv) To liaise and co-ordinate with the gas production organizations, Government and the gas users to ensure proper utilization of gas.

1.2 Briefing the Committee about the background of setting up of GAIL and the present activities of the Company, the CMD of GAIL, during his oral evidence before the Committee submitted as under:

“Sir, GAIL(India) Limited as it is called now was originally formed in 1984 as Gas Authority of India Limited. The organisation was born out of the Oil and Natural Gas Commission in those days basically because natural gas was being flared in Bombay High and a separate entity was created to take the gas to the fertilizer plants and power plants for which Hazira-Vijaipur-Jagdishpur and other pipelines were laid. That is how GAIL started its existence.

Over the last 22 years, we have diversified our portfolio into a number of areas which include gas processing, production of LPG gas, production of liquid carbons, gas cracking etc,.. We have a plant in Uttar Pradesh which produces about 3,30,000 tonnes of polymers. We have also diversified into city gas marketing. The most successful instance is that of Delhi where we have a joint venture called Indraprastha Gas Limited. As all the hon. Members may know, the entire public transport system of Delhi today runs on CNG. It has made a very big difference to the environment of the city.

In addition, we have eight more joint ventures for the cities of Mumbai, Hyderabad, Agartala, Indore, Pune, Kanpur and Lucknow. So, we have in total about eight cities for city gas disbursement. Now we have identified about 22 more cities where

we propose to have this particular line of business. We also have a very small presence in the telecom sector. We have a separate unit called GAIL -Tel which is involved in carriers' carrier to supply bandwidth to telecom companies.

I am very pleased to inform you that GAIL has participated in each round of New Exploration Licensing policy(NELP) and as on date, we have 13 blocks in India, two in Myanmar and one in Oman. One of these has already started producing oil. Gas has been discovered in both the blocks in which we are involved and associated with in Myanmar. We are very hopeful of finding oil and gas in the other blocks where we are working. I am equally happy to share with you that in the latest round of bids for coal bed methane, we have submitted bids along with some foreign partners. We are hopeful we should get about two to three blocks in this round. In addition, we are pursuing projects for gasification of coal because this country has the fourth largest stocks of coal in the world In terms of surface coal gasification as well as in-situ coal gasification, projects have been identified. We are working on them. We are looking at two petrochemical projects one in The North-East and one in Kerala. Then we have a proposal for petrochemical plant in Iran.

The Company has been performing in financial terms extremely well. Over the last five years, we have added almost 3.7 U.S.billion dollars to our market capitalization and the performance review by the Ministry of Petroleum and the DPE has been very satisfactory because all the MoUs that we have been signing with the Government have received excellent rating.”

1.3 From the preliminary material, the Committee note that

GAIL is the owner and operator of:

- India's largest gas transmission networks (5600 km. pipelines) World's longest exclusive Jamnagar-Loni LPG pipeline (1269 km) and another one Vizag-Secunderabad LPG pipeline (653 km.)
- Seven gas processing facilities with a capacity of more than 1 MMTPA of LPG.
- India's largest gas-based petrochemicals complex with an installed capacity of 310,000 TPA of polyethylene (HDPE, LDPE, LLDPE), which is undergoing expansion up to 440,000TPA.
- Optic fibre cable network of more than 9,000 Kms to offer bandwidth as a carrier's carrier in the telecom sector.

1.4 Asked as to whether any study has been conducted by the Ministry of Petroleum and Natural Gas to ascertain the extent to which the company has

achieved its objectives and the reasons for non-achievement of objectives, GAIL in their written note stated as follows:

“Every year, GAIL signs a Memorandum of Understanding (MoU) with the Ministry of Petroleum and Natural Gas, which is framed in line with the guidelines issued by the Department of Public Enterprises. The MoU envisages targets of achievement on all major activities of the company, which are computed with reference to the objectives, and micro-objectives of the company. GAIL has been receiving “Excellent” rating consistently since inception of MoUs, which bears a testimony of compliance of the micro objectives and accomplishment of the targets envisaged with reference to the same every year. The achievements of GAIL in this regard reached a pinnacle in the year 2004-05 when it accomplished the best possible score of 100/100.”

**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 petro-chemical 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 trans-national 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.**

## **2. Organisational set-up**

2.1 From the organizational set-up of GAIL it is noted that CMD is the head of the company and below him are five directors viz. Director (Marketing), Director (Projects), Director (Business Development), Director (Finance) and Director (HR) to oversee the activities of various divisions of the company. Besides above there are two Government nominees and three non-official part -time Directors on the board of Directors of GAIL.

2.2 Asked as to whether the present organizational set up was satisfactory, to run the company in an effective manner GAIL in their written reply stated as under:

“The present organizational set up is considered to be adequate/ satisfactory. However, in view of emerging new business requirements, the organizational set up may undergo changes in future, decisions on which will be taken at the appropriate time.”

2.3 On being asked about the changes that are contemplated in the organizational set-up in view of the new business requirements, GAIL in their note stated as under:

“During the last few years, GAIL has diversified its business portfolio by adding E&P, City gas marketing, Value added Energy Management System to name a few, besides creation of an investment arm GAIL Global (Singapore) Pte for overseas equity participation.

The diverse business profile has warranted a re-alignment of portfolio among the various Directors, that, inter-alia, includes creation of new directorate(s). Accordingly, a proposal for creation of position of Director (Operations) has been put up before the HR Committee, a sub- committee of Board of Directors. Further, based on the Government of India’s directions from time to time and directions of the Board of Directors, the organizational set up may require review and re-organization.”

GAIL has further stated that there is a requirement of additional Independent directors on the Board in terms of revised clause 49 of the Listing Agreement.

2.4 When asked as to whether GAIL has taken up the matter regarding the requirement of additional Independent Directors with the Ministry, GAIL in their reply stated as under:

“The matter has been taken up with the Ministry of Petroleum & Natural Gas a number of times. However, no decision has been communicated so far.”

2.5 Asked by the Committee to give the reasons for taking no decision on the requirement of additional independent directors for GAIL, Ministry in reply stated as under:

“At present, 3 Independent Directors are in position. Proposal for ad hoc extension of their tenure for a period of three months w.e.f. 18.8.2006 has been sent to DOPT for the approval of ACC. Proposal for appointment of Shri Ajit K. Kapadia as non-official part-time Director, has been returned by DOPT. Currently, proposal for induction of a fresh panel of non-official part-time Directors on the Board of GAIL is under consideration in the Ministry. This exercise will take some time. “

**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 a 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.

### **3.Performance of the Company**

#### **3(i). Project Appraisal**

3.(i)(a) From the Preliminary material furnished to the Committee, it is noted that during the last five years (2001-2006), GAIL has commissioned 5 major pipeline projects involving total actual cost of Rs.4142.00 Crore against approved cost of Rs. 5113.86 Crore Details giving actual expenditure vis-à-vis original estimates in respect of each of these projects are as under:

(Rs. in Crore)

Sl. No.	Project	Original approved cost	Actual/committed capital expenditure
1	Jamnagar – Loni LPG Pipeline	1167.00	1084.00
2	Lanco – Kondapalli Pipeline	299.50	186.00
3	Vizag – Secunderabad LPG Pipeline	491.00	480.00
4	Dahej – Vijaypur Pipeline	2936.36	2240.00
5	Thulendi – Phulpur Pipeline	220.00	152.00
Total		5113.86	4142.00

3.(i)(b) Asked as to whether all the projects were commissioned as per schedule and the reasons for delay in commissioning of projects if any, Ministry in their note stated as under :

“The projects at sl nos 1,2 and 3 were executed ahead of schedule. The Vizag-Secunderabad Pipeline project was mechanically completed within schedule. However, commissioning was delayed due to non-availability of LPG from the oil marketing companies. The commissioning of the Thulendi Phulpur Pipeline project was behind schedule by about three weeks as its commissioning was synchronized with the requirement of the customer viz., M/s IFFCO, Phulpur.

It may be stated that one of the projects viz., the prestigious 610 Km. long Dahej-Vijaipur gas pipeline (DVPL) project was successfully commissioned 5-1/2 months ahead of schedule.

In addition to the pipeline projects mentioned above, GAIL has also commissioned the Gas Cracker Unit at Pata, which is the first part of the Pata expansion project, involving actual capital expenditure of Rs. 72.15 crores against original estimated cost of Rs. 124.42 crores. The project was commissioned on 31.10.2005, the scheduled date of its commissioning”

3.(i)(c) Asked about the pipeline projects which are currently under execution and the position regarding their completion, GAIL in their note stated as under:

“The major pipeline projects, which are currently under execution, are: -

1. Dahej-Uran pipeline project
2. Dabhol-Panvel pipeline project
3. Vijaipur-Kota pipeline project
4. Kelaras-Malanpur pipeline project
5. Jagoti-Pithampur pipeline project
6. Dadri-Panipat pipeline project – under hold

Status as on 31.05.06

#### STATUS OF MAJOR P/L PROJECTS UNDER EXECUTION

Sl. No.	Project Name/ Description	Schedule Completion Date	Revised Completion Schedule	Anticipated Completion Date	Reasons for Delay in Completion
1.	Dahej-Uran Pipeline (30", 24", 18" – 475 kms, capacity – 12 MMSCMD	28.02.06	<b>Feb' 07</b> (as per Board resolution of 226 <sup>th</sup> Meeting on 21.06.05) <b>31.3.07</b> (as per record notes of review meeting dt. 13.4.06 Chaired by Secretary P&NG)	31.03.07	---
2.	Dabhol Panvel P/L	17.11.07	<b>17.11.07</b> (as per board approval) <b>31.3.07</b> (as per record notes of review meeting dt. 13.4.06 Chaired by Secretary P&NG)	31.3.07	---
3.	Vijaipur Kota Pipeline (18", 16", 8" – 192 Kms, Capacity – 3.47 MMSCMD	31.12.06	31.12.06	31.12.06	---
4.	Kelaras Malanpur Pipeline (12", 6", 4" – 95 Kms, Capacity – 2 MMSCMD	27.7.06	27.7.06	27.7.06	---
5.	Jagoti Pithampur Pipeline ( 16", 12", 4" – 180.50 kms Capacity 3 – MMSCMD	27.7.06	27.7.06	Dec. 2006	2 months delay is anticipated due to delay in award of

					order for procurement of linepipe.
6.	Dadri Panipat Pipeline (28", 16" – 122 kms, Capacity – 4.8 MMSCMD	18 months from project approval subject to signing of TSA/GSA and Environmental clearance.	---	---	Project under hold for want of GSA/ TSA with IOCL

From the above statement of status of implementation of above projects, it is noted that there are variations in the scheduled completion date, revised completion date and anticipated completion dates in respect of Dahej-Uran pipeline and Jagoti-Pitampur pipeline. Further, Dadri-Panipat pipeline has been underhold for want of GSA/TSA with IOCL.

3.(i)(d) The Committee were informed that Dahej-Uran pipeline was to be commissioned by 1<sup>st</sup> December 2006. However from the material furnished to the Committee it was noted that only 55.9% of the work has been completed till July 2006.

Asked to give the reasons for delay in the commissioning of Dahej-Uran pipeline, Secretary Ministry of Petroleum and natural gas, during his evidence before the Committee stated as under:

“It is because the source has not been tied up. In between there was a delay in supply of gas and that has made it. The Board has discussed, kept it on hold and that has been cleared. Once the particular tie-up is final and revised schedule has also been approved by the Board, the pipeline will be constructed.”

3.(i)(e) The CMD of GAIL further clarified that the construction has also started and there is no delay, as per the March 2007 schedule.

“In addition to the above mentioned pipeline projects, GAIL is also executing HDPE plant at Pata, which is the second part of the Pata expansion project. This project is expected to be completed by 24.03.2007 against the scheduled date of 30.04.2006. The main reason for the delay is non-availability of process package in time.”

3.(i)(f) Asked to indicate the reasons for delay in availability of process package, GAIL in their written reply stated as follows:

“Process package has been already made available on 25.03.2005. However, the reasons for its delay are as under:-

- 1.) Secretariat of Industrial Assistance (SIA) approval for technology transfer took nearly five months as against normal time of 15 days.
- 2.) In future cases, advance action will be taken for evaluation of different technologies.”

**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-tying-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.**

### **3(ii)Financial performance of the company**

3.(ii)(a) From the preliminary material, the Committee note that during the last four years, the financial performance of GAIL was as under:

<u>Item</u>	2002-03		2003-04		2004-05		2005-06	
	BE	Actual	BE	Actual	BE	Actual	BE	Actual
Turnover/ Sales	15928.22	10217.53	15474.12	10826.49	14873.56	12412.20	12200.36	14459.41
Value Added	2871.72	3756.00	2856.05	4079.00	3917.77	4413.00	3744.69	4467.76
Profit/Loss	896.68	1639.11	793.27	1869.34	1138.48	1953.91	1164	2310.07
Dividend paid to the Government	164.41	398.65	160.29	421.78	230.01	387.95	200.25	387.95*
Internal Generation of Resources	1565.46	2281.70	1509.20	2533.31	2207.65	2900.56	2127.67	2869.56

From the above it is noted that GAIL has been earning profits year after year. However there is a wide variation between the figure of estimated profit and the actual profit. Asked by the Committee as to why realistic assessment of profits was not made, the CMD of GAIL during his evidence before the Committee submitted as under:

“As far as profit is concerned, I wish to submit that based on our general experience, as a philosophy we try to be very conservative because if you make an estimate which is not met, then we find that the answerability to all concerned including the shareholders becomes that much higher. So, while we have been progressively showing a higher level of profit, in the budget we have consciously not pegged it to the actual performance because I may draw the kind attention of the Members that we are paying a subsidy for LPG and kerosene which has an impact on the profitability of the company. But its quantum is completely unknown to us. It is an element which we come to know on a quarter to quarter basis. Sometimes it is 150 per cent more than the previous quarter. So, we have chosen to be conservative to give a lower projection so that the final picture, as it emerges, is a pleasant surprise to all concerned rather than our having to disappoint people.”

He further added:

“Regarding the dip in the profitability, I would like to submit that the growth in the profitability would have been much more than regular had we not been subjected to sudden increases on account of subsidy. In earlier years, it was about Rs. 400 crore to Rs. 500 crore. In the last year, it was Rs. 1,100 crore. So, the impact of the subsidy has brought down the rate of growth in our profitability. It has also been affected by the higher price that we pay for our feedstocks for LPG and petrochemicals, but what has kept us afloat is the significant increase in the prices of petrochemicals.”

3.(ii)(b) Noting that GAIL’s profitability has been under heavy pressure due to the subsidy, borne on LPG, Committee asked the Ministry of Petroleum and natural gas as to why GAIL had been asked to share the subsidy burden of oil marketing companies on kerosene. In reply Ministry of Petroleum and natural gas stated as under :

“While higher international prices impacted the downstream companies marketing petroleum products adversely as they were not allowed to increase the consumer prices of sensitive retail products in line with the international prices, they benefited upstream companies like ONGC, OIL and GAIL. Keeping this in view, it was decided by the Government that a part of the under recoveries of the downstream marketing PSUs would be borne by the upstream companies by way of providing discounts on crude oil and products. As GAIL produces LPG, the quantum of under recovery to be borne by them was passed on to the downstream companies through discounts on LPG price. While it is correct that GAIL has been asked to share the under-recoveries on account of kerosene, it may be noted that during 2005-06 and at present while GAIL shares under-recoveries only on account of LPG and kerosene, ONGC and OIL share the under-recoveries on all four products, viz., Petrol, diesel, LPG and kerosene. The magnitude of total under-recoveries of Oil Marketing Companies is so large that all other companies, viz., ONGC, OIL and GAIL are required to contribute to make the mechanism work.”

3.(ii)(c) It is noted from the above that Ministry of Petroleum and Natural Gas has justified the sharing of subsidy burden of oil marketing companies by GAIL. However, the Report of the Committee on Pricing and taxation of Petroleum Products (February 2006), under the chairmanship of Dr. S. Rangarajan states otherwise. The Committee in their report has inter-alia

observed that to the extent the Government decides to extend subsidies, the burden should be borne entirely and transparently in the Union Budget.

The oil marketing companies should be freed from the burden of subsidy. It has recommended to discontinue the practice of asking ONGC/GAIL/OIL to provide up-stream assistance and observed that if no action is taken, and the Government is unable to provide the required subsidies, the financial position of the public sector oil companies will deteriorate rapidly, jeopardizing the country's energy security.

**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'.

### **3 (iii).Capacity utilization**

3.(iii)(a) Capacity utilization, during the preceding three years, of the natural gas pipelines and LPG pipelines being operated by GAIL is given in the following table:-

Sr. No.	Item	Capacity utilization (%)		
		2003-04	2004-05	2005-06
1	Natural Gas Pipelines	59.35	55.14	60.77
2	LPG Pipelines	73.6	58.41	60.86

From the above it is noted that capacity utilization of natural gas and LPG pipeline is about 63% only.

### **3.(iii)(b) Under-utilisation of Natural gas pipelines**

Asked to give the reasons for lower capacity utilization of natural gas pipelines, CMD, GAIL stated as under:

“On the utilisation part that you mentioned, I may submit that we have three kinds of pipelines. We have the main inter-State gas pipelines. These pipelines are utilised practically to 100 per cent capacity. We have smaller networks in the States of Gujarat, Andhra Pradesh, Tamil Nadu, Maharashtra and Tripura. These networks are utilised to the extent of, as you have mentioned, about 60 per cent only because there is not sufficient gas available from the main producer, ONGC. If the gas were available, then the pipelines would be utilised to a higher capacity and the consumers will also have more gas to use.”

Asked further about the steps that had been taken for increasing the capacity utilization of natural gas pipelines, GAIL in their note stated as under:

“Efforts are being made to source additional gas/LNG As and when the efforts start bearing fruit, capacity utilization of the gas pipelines are expected to go up considerably. In addition to sourcing of natural gas, GAIL is also endeavoring to tie up transportation of natural gas of other domestic producers to enhance capacity utilization of the pipelines.”

In a subsequent note, GAIL further stated as under:

“GAIL is already operating pipeline of 5600 Kms which connect various source points viz Hazira, Dahej, Uran, KG Basin, Cauvery, etc. In addition, Dabhol and Hazira LNG terminals will also be shortly connected to GAIL’s grid. Discussions are also in progress with major potential producers of gas viz SHELL, RIL, GSPCL, PMT, ONGC, etc for sourcing / transportation of gas from their new finds in future.”

### 3.(iii)(c) Under utilization of LPG Pipelines:

The Committee were informed that for transportation of LPG, GAIL has two pipelines namely Jamnagar-Loni and Vizag-Secunderabad. While utilization of Jamnagar-Loni pipeline was stated to be pretty high. The Committee were informed that utilization of Vizag-Secunderabad pipeline was merely 30-40%. As regards the under-utilization of Vizag-Secunderabad LPG pipeline GAIL stated that the main reason for the low capacity utilization of Vizag-Secunderabad LPG pipeline (30 to 40%) was due to non-usage of the pipeline to the fullest extent by the oil marketing companies under the Petroleum Ministry as the oil companies

were bringing in LPG by rail and road. Asked to explain the reasons for low capacity utilization of Vizag –Secunderabad LPG pipeline, GAIL in their note stated as under.

“LPG availability at Vizag through indigenous refinery production/imports is limited as the OMCs are not able to receive full LPG import parcel due to inadequate LPG storage available at Vizag. Therefore, OMCs are sourcing part requirement of their bottling plants located at Secunderabad through alternate supply sources such as Mangalore, Ratnagiri, Mumbai and Hazira through road/rail modes. Moreover, sourcing of product for Secunderabad through rail is logistically cheaper. “

Asked by the Committee as to whether the Ministry of Petroleum and Natural gas were aware of the Low Capacity utilization of above pipeline and If so, what action was taken by them so as to augment the capacity utilization, the Ministry in their written reply stated as follows :

“The Vizag-Secunderabad LPG pipeline has a capacity of 1.33 MMTPA and the pipeline was commissioned in April 2004. The oil marketing companies (OMCs) are presently meeting 75-80% of their total LPG requirement of all bottling plants en-route VSPL through the pipeline. The Ministry of Petroleum & Natural Gas is aware of low capacity utilization of the pipeline (at present about 0.40 MMTPA).

Measures undertaken to increase the VSPL utilization are as follows:-

1. Discussions are progressing with IOC to provide VSPL connectivity to their Parwada bottling plant and with HPCL to their Rajamundry plant 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, which will augment the LPG availability at Vizag through receipt of large import parcel, thereby improving utilization of VSPL.
3. There will be no ‘Take or Pay’ obligation on OMCs and OMCs will utilize the pipeline on ‘best endeavour’ basis on economic considerations.
4. GAIL is exploring the possibility of transportation of POL products through VSPL, thus proposing to make VSPL a multi product pipeline.”



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 utilization 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.

#### **4. GAS EXPLORATION BY GAIL**

4.1 From the preliminary material, Committee note that to ensure long-term gas-supply security from multiple natural gas sources, GAIL has ventured into liquefied natural gas re-gasification and exploration & production through joint ventures / equity participation routes. GAIL has made equity participation in several joint ventures in India and abroad. The extent of equity participation made in the joint ventures is, ranging from 10% - 80% in 16 blocks.

4.2 Giving a brief background about the exploration activities of GAIL, the CMD during the evidence submitted as under: -

“...The primary activity in which ONGC is engaged is of exploration and production. They produce huge quantities of oil and gas in this country. They needed an organisation who, with uncluttered mind, would concentrate on how to reach the gas to the customers. That is how GAIL was created. We started as a pipeline company, but then we developed ambitions on our own and we actually poached into ONGC’s territory by getting into exploration as well.”

He further added: -

“...At one time, nobody other than ONGC and Oil India could engage in exploration and production in this country. But the new Exploration Licensing Policy came, and it has thrown open this field to all. Therefore, we also pitched into it.”

4.3 On being asked as to how many independent blocks have been acquired by GAIL and the details regarding the discovery of gas in such blocks, GAIL in their written reply stated as follows:

“GAIL consortium has so far been awarded 16 exploration blocks comprising of 2 blocks under NELP-I, 5 blocks under NELP-II, 2 blocks under NELP-IV, 3 blocks under NELP-V, 3 “farm-in” blocks and 1 block acquired overseas through bidding.

Gas has been discovered in Blocks A-1 and A-3 in Myanmar in January, 2004 and March, 2006 respectively. The estimated gas in-place is of the order of 5.7 to 10 trillion cubic feet (TCF) in both the blocks taken together, of which recoverable reserves are of the order of 4.8 to 8.6 trillion cubic feet (as per the estimates confirmed by Gaffney Cline & Associates.)

Oil has been discovered in the Cambay onland block in September, 2004. The block is under test production, producing approx. 400 barrels of oil per day.”

The details of the exploration blocks with GAIL’s participation are given below :

S. No	Block No.	Date of PSC Signing	Participating Interest & Partner	Current Expln. Phase
<b>NELP - I</b>				
1	MN-OSN-97/3 Mahanadi Offshore	12.04.2000	GAIL - 15% ONGC (Operator) - 85%	Phase-II
2	NEC-OSN-97/1 Bay of Bengal Offshore	03.10.2000	GAIL - 50% GAZPROM (Operator) - 50%	Phase-II
<b>NELP – II</b>				
3	GS-DWN-2000/2 Gujarat Saurashtra Offshore	17.07.2001	GAIL - 15% ONGC (Operator) - 85%	Phase-I
4	MB-DWN-2000/2 Mumbai Offshore	17.07.2001	GAIL - 15% ONGC (Operator) - 50% IOC - 15% OIL - 10% GSPC - 10%	Phase-I
5	MN-OSN-2000/2 Mahanadi Offshore	17.07.2001	GAIL - 20% ONGC (Operator) - 40% IOC - 20% OIL - 20%	Phase-II
6	CB-ONN-2000/1 Cambay Onland	17.07.2001	GAIL - 50% GSPC(Operator) - 50%	Phase-II
7	MN-ONN-2000/1 Mahanadi Onland	17.07.2001	GAIL - 20% OIL (Operator) - 40% IOC - 20% ONGC - 20%	Phase-II
<b>NELP – IV</b>				
8	AA-ONN-2000/1 Tripura Onland	06.02.2004	GAIL - 80% JOGPL (Operator) - 20%	Phase-I
9	CY-ONN-2000/1 Cauvery Onland	06.02.2004	GAIL - 50% JOGPL (Operator) - 30% GSPC - 20%	Phase-I

Sl. No	Block No.	Date of PSC Signing	Participating Interest & Partner	Current Expln. Phase
<b>“Farm – in”</b>				
10	A-1, Myanmar Offshore	01.10.2000	GAIL - 10% DAEWOO (Operator) - 60% OVL - 20% KOGAS - 10%	3 <sup>rd</sup> One Year Extension Period

11	A-3, Myanmar Offshore	Assignment Agreement signed on: 03.10.2005	GAIL - 10% DAEWOO (Operator) - 60% OVL - 20% KOGAS - 10%	2 <sup>nd</sup> Exploration Period
12	CY-OS/2 Cauvery Offshore	19.11.1996 (Farm-in w.e.f. 22.2.2002)	GAIL - 25% HARDY (Operator) - 75%	Phase-III
<b>NELP – V</b>				
13	AA-ONN-2003/2 Assam Onland	16.12.2005	GAIL - 35% JOGPL (Operator) - 10% JSPL - 35% GSPC - 20%	Grant of PEL is awaited.
14	AN-DWN-2003/2 Andaman Offshore	23.09.2005	GAIL - 15% Eni India (Operator) - 40 % ONGC - 45%	Phase – I
15	CB-ONN-2003/2 Cambay Onland	23.09.2005	GAIL - 20% GSPC (Operator) - 50% JCPL - 20% GGR - 10%	Phase-I
<b>Blocks acquired by bidding (Overseas)</b>				
16	Block 56, Oman	28.06.06	GAIL - 25% OILEX NL (Operator)- 25% Videocon - 25% HPCL - 12.5% BPCL - 12.5%	Initial Period

4.4 On being asked further as to how much money is invested every year by GAIL in Exploration & Production of Natural Gas, GAIL in their note stated as follows :

“Amounts invested in exploration and production by GAIL during the last six years are as follows:-

(Rs./crore)

Year	Amount
2000-01	0.24
2001-02	11.81
2002-03	20.74
2003-04	29.46
2004-05	77.26
2005-06	192.42
<b>Total</b>	<b>331.93</b>

4.5 From the details regarding exploration activities of GAIL, the Committee note that GAIL’s participation in exploration of gas as a partner in various blocks varies from 10-80 %. In many blocks, where GAIL’s equity participation is as high as 50 – 80%, they are not operators. in any of the blocks. Asked to give the reasons due to which GAIL has not taken up the job of

operator in any of the blocks, the Ministry of Petroleum & Natural Gas in its written reply stated as follows:

1. GAIL has 10% share in A-1 and A-3 block in Myanmar fields. GAIL is not the operator in these blocks. Daewoo, Korea is the operator of these blocks.
2. GAIL is participating in 16 exploration blocks as non-operating partner. The participating interests vary from 10% to 80%.
3. The eligibility for taking up operatorship under NELP is defined by the Directorate General of Hydrocarbons (DGH) during various NELP rounds.
4. During NELP-V, GAIL had bid as an operator in 2 blocks which the GAIL consortium could not win. In NELP-VI, as per the qualification criteria of bidding document, GAIL cannot bid as operator on its own since operatorship experience has been made mandatory. However, GAIL can participate as a joint operating partner along with other operators.
5. It is further mentioned that in one of the NELP awarded blocks, there is a provision in the Joint Operating Agreement (JOA) executed under the auspices of Production Sharing Contract (PSC) for GAIL to assume operatorship on a rotational basis.
6. As regards GAIL's participation in blocks abroad, the stipulation of operatorship would be as per the terms and conditions for such participation.

**GAIL was set-up 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 feed stock 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.**

## **5. THE ROLE OF GAIL IN INDIA'S GAS SECURITY**

5.1 In view of hike in the prices of crude oil and pressure in the international market to make optimum use of gas, Committee desired to know as to how GAIL proposed to help the economy and to achieve the security level to meet the energy requirements of industries. In reply the CMD of GAIL stated as under:

“Sir, first of all, let me share with you that currently gas constitutes eight per cent of the energy consumption in this country. In other words, the majority of the supply of energy in this country comes from coal followed by oil and not by gas. Further, there has been review of the energy basket compositions by GoM. The Planning Commission recently has looked at this issue and it is expected that the contribution of gas to the energy sector will go up to 20 per cent in the next 15 to 20 years' time, which also means that even 15-20 years down the road, gas will not be the primary source of energy for this country.

Having said so, since we are in the dedicated business related to natural gas, we adopted a multi-pronged strategy. Firstly, as I have mentioned earlier, we have participated in the earlier rounds of NELP. The sixth round is due in September and GAIL will be participating in that. The second strategy that we have adopted is that we are trying to promote the use of LNG in this country. We have also discussed with SHELL for taking part in LNG terminal at Hazira. As you know, we have taken part in, an integrated LNG cum power project at Dabhol. We are one of the promoters of LNG at Kochi. In other words, on the West Coast alone, GAIL will be involved in at least three to four LNG terminals, the capacity of each of which will be five million tonnes which can be increased to ten million tonnes. So, I can say that during the 11<sup>th</sup> Plan period, we may have the capacity to import 40 million tonnes of LNG which is definitely going to relieve the pressure on liquid fuels for primary source of energy as well as for domestic sectors today.

Thirdly, to bring gas by trans-national pipelines, we have had rounds of negotiations at the Government to Government level on the Iran-Pakistan-India pipeline. We are making strides in putting up a pipeline from Myanmar to India. There has been progress also recently on the Turkmenistan-Afghanistan-Pakistan-India pipeline. Several meetings and discussions on these projects have taken place. These projects are being taken up under bilateral discussion with different countries.

While we, as commercial people, as professional managers, are taking the discussions forward, there are, as the hon. Members know, geo-political dimensions to these projects. It is only when these geo-political dimensions are resolved that we will be actually in a position to



execute the projects. We find each one of them techno-commercially viable projects.

Fourthly, as I mentioned earlier, coal in this country is not utilised to the extent that it should be because of environmental issues and handling issues. So, we have taken recourse to clean coal technology. It can produce gas from coal by either gasifying coal based ground sources of gasification inside the pit itself as lignite. That is yet another strategy that we have adopted. I believe that a combination of these multiple strategies will enable us to reach the target of 20 per cent contribution to the energy basket. We are also looking at participating in CBM because there are blocks outside India like South Africa, Myanmar and other countries. This will make gas available to us and to other producers. We try to bring LNG from nearby countries”.

5.2 The Secretary, during the evidence, submitted in this regard as under: -

“Today, the availability of gas in India is roughly 95 to 100 million cubic metres per day including LNG, which is also emerging as a major source of augmented availability of hydro carbons in this country. We are, today, importing close to 18 to 20 million cubic metres per day equivalent to LNG. We are proposing to enhance in order to be able to meet our energy security in an effective and efficient manner. We are also engaged in discussion with countries such as with Iran, Turkmenistan and Myanmar with a view to importing gas from them.

Today, we are able to meet only around 60 per cent of our demand. With the expected increase in domestic production over the next five years, the domestic supply is expected to increase substantially by 2010-11. Even then the demand will still increase and continue to rise higher because gas is emerging a preferred fuel.

Globally, today, gas occupies 23 per cent to 24 per cent of the total hydro carbons used. Over the next 20 years, it is expected to increase up to 40 per cent, as I mentioned, with the technological break-through when pipeline gas mobility and tradability and use will increase.

Coming to India, today, gas occupies eight per cent of our total energy. This 8 per cent is expected to increase up to 20 per cent over the next 20 years. I think, it is a sizeable increase which will require considerable investment in our exploration, considerable investment in our production and also tremendous investment in our gas transportation infrastructure facilities.”

## **5 (i).Import of gas through transnational pipelines**

5.(i).(a) Briefing the Committee about the import of gas through transnational pipelines the Secretary Ministry of Petroleum and Natural Gas stated as follows:-

“Sir, now let me mention all the three one by one – Iran-Pakistan-India pipeline, Myanmar-India pipeline through or without passing through Bangladesh and the third is Turkmenistan-Afghanistan-Pakistan-India pipeline.

Iran-Pakistan-India pipeline has been under discussion for the past over two and half years. There were several issues which were really topics of discussion. In a pipeline which passes through troubled region, we have to take extra precaution in order to ensure safety and security of people and also safety of the infrastructure, namely the pipeline. All the technical parameters have been more or less finalised by a specific sub-committee consisting of representatives of three countries. What should be the project structure for implementing the pipeline whether it should be one consortium which takes care of the entire segment right from upstream to down stream or the respective country should take care of the respective segment. On this point also a consensus has emerged. The final issue is one of pricing.”

5.(i).(b) The Secretary, further stated as under :

“The only issue which is now pending resolution and which is under active discussion between the three countries is the price at which gas is to be sold by Iran and the price at which Pakistan and India are willing to buy it. Till this issue is resolved, all the major issues of the project, namely, project structure, the technical parameters, the contours of the pipeline, the terrain and the alignment are more or less frozen. Once the price is finalised, things will be clear. The thing is, we are talking about an agreement which will involve a total outgo of close to 25 billion dollars from this country and close to 15 billion dollars from Pakistan. We are talking about a total involvement of 40 billion dollars as the cost or the price of gas. These are not negotiated overnight and signed because the producing country has its expectation. When the global scenario changes, they also think why not we ask for a higher price. This sort of a negotiation goes on and on for months together. We have already had three rounds of major discussions at Secretaries level. In fact, two months back, we were in Shanghai and we met the Iranian President on this matter. He also expressed the desire that it has to be a matter of give and take from both sides, that is, the buyer and the seller.

Both of them have to come to an understanding and we will try to resolve it. We are very confident that over the next two months, the pricing issue will see a resolution. Once this is done, then the zero date for the project commences. The total project investment is over 7 to 10 billion dollars including the upstream development. Getting the funds is going to be a major issue because any lender will ask for an upstream tie-up. We will say that unless we are satisfied that gas production will start on that day, how will I ensure the safety of my funds? All these things will take time but we will resolve them. Once the price issue is resolved which we are expecting within the next two months, and once the financial closure is achieved, the project will start because physical project per se is not a complicated business. It is just a matter of three years. Once the first pipe is laid, it is three years flat for the whole pipeline and the gas will start flowing. The preliminary work and the planning take a long time. In fact, if you take into account other international pipelines, they have been under discussion for 7 to 8 to 15 years. But once the physical work starts, it is a matter of three years. But if you start the physical work without adequate planning, I think the project will stand half way and we do not want this to happen.

As regards Turkmenistan-Afghanistan-Pakistan-India, till last year, India was not in the picture. Only this May, the Government gave the clearance for participation of India in the project. We have communicated our willingness to participate in the project. Earlier, there were only three countries involved and now with our participation, it would become four countries. The first meeting of all the four countries together to discuss this project is expected to take place sometime in near future. One factor which is really to be ascertained, verified and got satisfied by all the concerned countries is the extent of reserves available in Turkmenistan for supplying the demands of Pakistan and India because Turkmenistan has already committed a huge quantity of gas to Russia. After leaving that, do they have adequate reserves to supply gas through a pipeline for 25 years to Pakistan and India? This is one factor on which we have requested ADB which is the technical sponsor of the project to go to Turkmenistan, sit with them, have enough surveys and explorations and then come back to us with a clean certification. Once that certification is available, then serious discussions will begin. We are very confident that over the next four to five months, ADB will be in a position to give the necessary certification. After that, the discussion will start.

About Myanmar, as I mentioned, we have about 30 per cent share through our two companies, the ONGC Videsh Limited and GAIL. It is 30 per cent in two blocks. Each country follows its own strategy for price fixation. What Myanmar has done is this. The majority of gas produced in Myanmar is at present being sold by

them to Thailand. Last month, they have floated an international bid for the quantum of gas from these two new blocks. They asked India also to put in the bid. So, we have put in the bid. If you are the highest bidder, then we will get the gas. Once we get the gas, we already have the pipeline ready for getting that gas from Myanmar to India through our North-East from where we will hook it up to the rest of the gas pipeline. So, if that bid is acceptable to Myanmar, over the next two months negotiations should reach the final shape. Then whoever is the winner will get the gas. But it does not mean that if we are not the winner, we will not get anything. We will still get the money for our share of the gas with which we can buy gas elsewhere. So, that is not the major issue”.

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 have 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-Afganistan-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.

## **5(ii). Liquefied Natural Gas (LNG)**

### **Import of Liquefied Natural Gas (LNG)**

5(ii) (a) The Committee were informed that LNG is emerging as a major source of augmented availability of hydro carbons in this country. LNG is the natural gas liquefied at -160 celcius in atmospheric pressure. Natural gas is liquefied to facilitate transportation in cryogenic tankers across sea.

5(ii)(b) On the issue of import of LNG, Secretary, Ministry of Petroleum & Natural gas, during his evidence before the Committee stated as follows:

“We are, today, importing close to 18 to 20 million cubic metres per day equivalent to LNG. We are proposing to enhance it in order to be able to meet our energy security in an effective and efficient manner.”

5(ii)(c) The Committee were informed that an agreement had been signed with an Iranian Company NIGEC to bring LNG from Iran to Kochi which however did not fructify subsequently. When asked as to what steps have been taken by Ministry to speed up the LNG deal between Iran and India the Ministry of Petroleum and Natural Gas in their written reply stated as follows: -

“Minister, P&NG had a meeting with President of Islamic Republic of Iran on 15.6.2006 at Shanghai, China. In the meeting, he raised the issue of delay in the implementation of the Liquefied Natural Gas (LNG) contract signed by Indian companies with the National Iranian Gas Export Company (NIGEC) in June 2005 for import of LNG from Iran. The Iranian President agreed to refer the matter to the Parliamentary Committee in Iran for consideration.

Subsequently, Minister P&NG has written to the Iranian President and their Petroleum Minister for expediting the implementation of the SPA.

Our view is that the LNG Share-Purchase Agreement (SPA) signed between the Indian and Iranian companies in June 2005 is a legally binding contract. The contract has, inter alia, price revision clause. Both sides should be bound by the terms & conditions of the contract.”

5(ii)(d) Explaining the present position of deal entered into with Iranian Government for bringing LNG to Kochi, CMD, GAIL stated as under:

“We had signed an agreement with NIGEC, an Iranian company, to bring five million tonnes of LNG to Kochi. It was all signed, tied up and finalised. Unfortunately for us, there was a change in the Government in Iran and the present Government does not appear to be in the frame of mind to honour that agreement. As a result, a question mark has got raised on the availability of LNG from Iran.

5(ii)(e) As regard sourcing of LNG from Australia, CMD, GAIL further stated as under:

“Petronet LNG has started discussions and advanced quite a bit with EXONMOBIL for supply of LNG from Australia from their Gorgon project. This project, unfortunately, had some problems in environmental terms and the indications are that the availability of LNG from this project may be delayed by a year, but Petronet LNG is in an advanced stage of discussions with this supplier.”

5(ii)(f) On the issue of import of LNG, Secretary, Ministry of Petroleum & Natural gas, during his evidence submitted as under:

“...Now, when we import gas as LNG, our sources are very limited. There are only four or five countries which really have the capacity to produce LNG. So, the price is quoted by them. When we have to buy from them we normally prefer to enter into a long-term contract which sets out the provisions for pricing. For instance with Qatar, we have entered into a long-term contract for 25 years in accordance with the pricing formula. With Iran, now we are negotiating. In fact, all the other terms have been almost finalised; it is the pricing which is now really forming the focus of discussion. We already had three rounds of discussions....”

#### Setting up of LNG terminals

LNG is received from exporting countries in liquefied form through cryogenic ships. It is converted into gaseous form at LNG terminals.

5(ii)(g) The Committee were informed that as per the Xth Plan, it was expected that four LNG terminals would be commissioned by the end of the Plan period; imports in the range of 40-50 Million Standard Cubic Metres Per Day



(MMSCMD) were expected. However, only PLL's 5 MMTPA Dahej LNG terminal and HLPL's 2.5 MMTPA LNG terminal have been commissioned in April 2004 and April 2005 respectively. Dabhol LNG terminal (5 MMTPA), which was also expected to be commissioned during the Plan period, is likely to be fully commissioned by 2009 on account of the break water requirement. Kochi LNG terminal (2.5 MMTPA) is projected to be commissioned during 2009-2010.

5(ii)(h) Asked about the progress of work pertaining to setting up of LNG Terminals at Dabhol, Ennore, Mangalore, Kochi and expansion of LNG Terminals at Dahej, the Secretary Ministry of Petroleum and Natural Gas stated as follows:-

"The LNG terminals are one of the main sources of helping us to meet our energy security. As I said earlier, gas can be imported in two forms from the neighbouring countries in the region through pipeline and from any source in the world through an LNG terminal. The exporting country liquefies it. So, it has a liquefaction facility. Then, it sends the gas by ship. In the importing country, we have to have the re-gasification facility, that is, the LNG terminal that we are talking about in this country. In fact, over the past ten years, the LNG terminals have really progressed phenomenally in our country. Now, the Petronet terminal at Dahej, which was created with a capacity of five million tonnes, is being expanded to 10 million tonnes. This is expected to be completed by mid-2009.

Secondly, the Dabhol LNG terminal, as the hon. Members are aware, was lying rusted for the past over five years. It remained unused. So, the whole terminal is being refurbished. Apart from that, certain other components are being added to it. For instance, at that time, there was no breakwater. Without the breakwater, you cannot really utilise it fully throughout the year in all weather conditions. We are adding a breakwater. We are also revamping the whole terminal. We are also thinking of expanding the capacity so that mercantile sale also can be facilitated at a later date. Once we tie up the necessary LNG for which we are in negotiations with other sources including Qatar, Oman, Yemen and Algeria, the situation will improve.

The third one is about the Cochin terminal. For that, tenders have been finalised and the work has been awarded. It is expected to be completed and commissioned in all respects by September, 2009. Gas tie up is near finalisation with an LNG source in Australia. It is expected to be signed over the next two or three months.

Apart from that, there is the Ennore terminal in Tamil Nadu and the Mangalore terminal in Karnataka. They are also emerging as possible LNG terminal sources. Mangalore terminal is under ONGC. It is a

huge refinery. So, the capacity is also being expanded. Ennore has also a major base. It has two major ports in the close vicinity. So, these are also emerging. The only thing is that gas procurement is under negotiation. So, the thing is that we have to finalise gas, sign the agreement and then start working on the terminal. Otherwise, the terminal will become an idle facility. So, we are very careful not to make it an idle investment. These are at various stages. We are very confident that within the next six or ten years, India will have an LNG import handling capacity close to 40 million tonnes which is very satisfactory.”

5(ii)(i) Commenting on the expansion programme of Petronet terminal at Dahej the Secretary stated as follows:-

“Dahej was commissioned in March, 2004 with a capacity of five million tonnes. It is already handling up to 6.2 million tonnes. This terminal is being expanded into a ten million capacity facility which will be commissioned by mid-2009. Expansion will be completed by mid-2009. When the expansion is completed, they will be able to handle over 11 million tonnes per annum.”

**The Committee note that country is importing close to 18-20 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.

### **5 (iii).Underground Coal Gasification**

The Committee have been informed that GAIL has taken up projects for production of gas from coal.

5 (iii).(a). When asked as to whether the Ministry of Petroleum and Natural Gas has chalked out any plans for production of gas from coal, the Ministry in their written reply stated as follows: -

“UCG is a potential economic means for extracting gas from deep seated and/or isolated coal deposits/ lignite resources, which may not be amenable to conventional physical extraction economically. As per the 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 (which is many times the conventional gas resources of the country at present). Even if a fraction of this is realized, it will go a long way to meet our energy needs. That is why UCG needs more attention as it has a tremendous potential and high rewards.

The extraction of gas through UCG process involves drilling of wells and injection of air/oxygen with water or steam in the coal seam. The companies working under MOP&NG are well versed with the drilling technology and water/steam injection process.

ONGC has signed an MOU with Skochinsky Institute of Mining (SIM), Russia having expertise in the field of UCG. GAIL (India) Ltd. has also signed an MOU with Ergo (a Canada based company) for exploitation of UCG potential.”

5 (iii).(b). Elaborating further, the Secretary, Ministry of Petroleum and Natural Gas submitted during their oral evidence before the Committee as follows:-

“Coal gasification is very high level of technology which very few countries in the world have it. Now, ONGC and GAIL have entered into an agreement with agencies which are competent in the coal gasification. We are in the process of identifying four or five coal blocks in different parts of the country and have a technology tie up with companies, like, for instance, Shell, GE, Sasan of South Africa, etc. We entered into collaboration with them. We want to initiate this process because over the next 10-15 years, for coal rich countries this will emerge as a very clean source of energy. We are focussing on that. ONGC has tied up with a Russian Agency on this and GAIL also has a tie up with M/s.Ergo Exergy Technologies Inc, Canada. We are making good progress on this.”

**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.

## **6. GAS TRANSMISSION BY GAIL**

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

6.(i)(a) As per a note furnished to the Committee, the percentage shares of GAIL in natural gas transmission during the last three years are given below:-

Year	Percentage	Volume (MMSCMD)
2003-04	90	62.84
2004-05	87.98	71.56
2005-06	86.07	78.87

From the above it is noted that GAIL's share in the Natural Gas Transmission business has declined from 90% to 86%

6.(i)(b) Briefing the Committee about the decline in transmission business, the CMD of GAIL, during the oral evidence submitted as under: -

“To begin with, let me clarify that as far as the transmission business is concerned, our share at one time was 100 per cent because there was no other company other than GAIL which was in the transmission business. Now, between the time the company was created in 1984 and now, a number of players have entered this transmission business. We have a company in Assam. We have a company in Gujarat. There is going to be a major transmission activity on the part of Reliance Industries from 2008-2009. Obviously, the 100 per cent share that we had cannot remain at that level. It has to come down. It is coming down. It has come down to about 75 per cent or so, if I remember correctly.”

6.(i)(c) When asked as to what steps have been taken by the Ministry to arrest the continuous decline in the percentage share of GAIL in natural gas transmission business, the Ministry of Petroleum & Natural Gas in their reply stated as follows:

“The opening of the gas market has allowed/is likely to further allow the entry of multiple players in wholesale distribution, transmission and marketing of natural gas. This has resulted/is likely to further result in decreasing GAIL's market share in natural gas transmission business.

Govt. intends to have multiple players in this sector, so that it results in healthy competition and better development of the market and benefit to the consumers.

While, Government has been encouraging GAIL to source gas from different sources so that GAIL can lay more pipelines to cater to the needs of different States and to expand its business, it is for GAIL to tie-up gas on commercial considerations.”

6.(i)(d) Asked about the future plans for the strengthening of gas transmission business, GAIL in their note stated as under:

“GAIL proposes to strengthen its core natural gas transmission business by building key inter-state trunk pipelines to increase the total network from 5300 km to 12000 km by laying following pipelines (viz. Jagdishpur-Haldia Pipeline (1450 Km), Dadri-Nangal Pipeline (600 Km), Myanmar-India pipeline via NE Indian territory (1575 Km), Dabhol – Bangalore pipeline (650 Km), Kochi-Kanjirkkod-Mangalore/ Bangalore pipeline (900Km), Kakinada- Kolkata pipeline (1100 Km) and Kakinada-Chennai pipeline (550 Km) etc. over the next 8 years at a cost of Rs. 15000-20000 crores subject to firming up of gas supply sources.”

**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.

## **6. (ii), National Gas Grid Project**

6.(ii)(a) National Gas Grid is a network of high pressure inter-state gas pipelines to provide gas to all parts of the country, by linking sources and supply of Natural gas to end – subscribers, especially in energy deficient industrial belts across the country .

6.(ii)(b) From the preliminary material, Committee note that GAIL is the owner and operator of India's largest gas transmission networks (5600 km pipelines) and company has plans to develop Inter State Gas Grid (ISGG) under which gas available from sources like Dahej and Kochi terminals of Petronet LNG Limited (PLL), Dabhol, Ennore, Myanmar gas, Iran gas and other gas sources of Kakinada is planned to be connected to the various limbs of ISGG to cater to the needs of customers along the network.

The limbs of Inter State Gas Grid are given below: -

- 1) Dahej-Vijaipur
- 2) Dahej-Uran
- 3) Dadri-Panipat-Nangal (Punjab Sector)
- 4) Vijaipur-Kota-Mathania(Rajasthan Sector)
- 5) Kakinada-Uran
- 6) Kakinada-Chennai
- 7) Kakinada-Kolkata
- 8) Kolkata-Jagdishpur
- 9) Dabhol-Bangalore-Chennai-Tuticorin
- 10) Kochi-Kanjirkkod-Mangalore
- 11) Bangalore-Coimbatore- Kayamkulam
- 12) Myanmar-Mizoram-Assam-Bihar
- 13) Hyderabad-Vijaipur
- 14) Vijaipur-Jagdishpur
- 15) Dahej-Jamnagar-Porbandar
- 16) Dahej-Panvel pipeline sector



6.(ii)(C) The Committee were informed that out of the 16 limbs mentioned above, Dahej – Vijaipur pipeline (DVPL) has been completed and is presently evacuating regasified liquefied natural gas (RLNG) from Dahej. Dahej - Uran pipeline and Vijaipur – Kota pipeline are under execution. Detailed feasibility report (DFR) for Chennai- Tuticorin section of Dabhol-Bangalore –Chennai –Tuticorin pipeline and Hyderabad-Vijaipiur pipeline are being taken up. DFRs for the balance limbs of ISGG have been completed.

**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.**

### **6. (III). GAS PIPELINE POLICY:**

6.(iii)(a) Regarding framework for laying of gas transmission pipelines, gas trunk pipelines and inter-city pipelines, the Secretary, Ministry of Petroleum and Natural gas during his evidence stated as under:

”Coming to the transportation, the natural gas pipeline policy which is expected to be issued within the next two weeks, lays down the policy framework for the gas transmission pipelines, gas trunk pipelines, as well as inter-city pipelines, within the city, that is local gas distribution network. All this and the necessary conditions under which these will be laid and the necessary provisions

governing the broad policy are contained in the natural gas pipeline policy. I think, this will help as a guideline to prospective investors because we need huge investment in this sector. “

6.(iii)(b) Salient features of the proposed gas pipeline policy were stated to be as under :

- i) All the natural gas and city or local distribution pipelines will be laid in accordance with the Authorization granted by the Regulatory Board under a transparent mechanism. Dedicated pipelines laid to supply gas to specific consumers originating from regulated pipelines will not require the authorization.
- ii) Regulator shall develop a comprehensive set of technical standards and safety standards as well as a code for grid connectivity.
- iii) Progressive unbundling of common carrier transmission activity and gas marketing activity.
- iv) The designed pipeline capacity to be at least 33% percent more than the maximum capacity requirement of the proposer and those who tie up for capacity. Such capacity would be made available on 'open access and non discriminatory basis at transportation rates laid down by the Board.
- v) The Board may consider different exclusivity periods for setting up of City gas distribution networks and for marketing of gas by the entity developing such networks.
- vi) Authorization to the proposer may be cancelled with forfeiture of his security deposit, if the conditions of the authorization are not adhered to or the project is delayed beyond the stipulated milestone (s).
- vii) Once the project is commissioned the bid bond would convert into a performance bond and would provide the guarantee for satisfactory compliance of the conditions stated in the authorization during the life of the project.
- viii) The transportation tariff for the transmission pipeline or city or local natural gas distribution network, as also the manner of determining such tariff will be laid down by the Board.
- ix) The Government to prepare long term perspective plan for creating gas pipeline network in consultation with the Board, State Governments, Oil and Gas industry, Gas consuming Industries and other stake holders. The Plan will be kept in view while authorizing / approving new pipelines.
- x) A National Gas Advisory Board (NGAB) shall be constituted by Government to advise the Government on all matters relating to this Policy. The advice of NGAB shall not be binding on the Government.
- xi) To compliment and supplement the domestic investment, FDI upto 100% is permitted in laying natural gas pipelines under automatic approval route.
- xii) State Governments to ensure various statutory and other clearances on a fast track basis.
- xiii) State Governments shall prepare their plans for developing the city or local gas distribution networks, prioritizing the cities or local areas.

Views and comments of various stakeholders were invited on the draft pipeline policy. Two meetings have also been held with the stakeholders in June and July 2006. Pipeline Policy is under finalization in consultation with the stakeholders.

As the proposed policy is aimed at facilitating open access for all players to the pipeline network on non-discriminatory basis, it is expected to prove beneficial to all the stakeholders. It would encourage more investment in the sector and ensure development across the whole spectrum of activities.

**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.**

## **7. GAS STORAGE CAPACITY**

Explaining the need for creation of gas storage capacity, the CMD of GAIL during the oral evidence submitted as under: -

“As far as storage capacity is concerned, the ground situation is that today there is zero storage for natural gas in this country, with GAIL or anybody for that matter. Normally, gas as it comes out from the gas fields is supplied to the customers, and in the event of any disruption, we try to give the quantity which is there in compressed form within the pipeline, which is called ‘line-pack’. The other option is to tell them to use other fuels like liquid fuels but this is not at all in a satisfactory state of affairs if GAIL’s gas contribution is to go from about eight per cent to 15 per cent in 15 years’ time. We have stressed this point with the Government.

We have started feasibility studies because natural gas is not normally stored in tanks or spheres as is done for LPG and other products. It is stored underground in salt caverns or depleted fields or in aquifers. So, that feasibility study has already been started by us, and we believe that, at least, three weeks storage system should be created in this country. And, I think, in the next four to five years, this storage should get created. Otherwise, we have a very serious problem of industries having to shut down production for want of storage.

The point I am trying to make is that we are conscious of this; we have raised this issue with the Government. We have even discussed it with the Oil Industry Development Board to give us financial support. This process is being actively pursued in our company.”

**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.**

## **8. GAS DISTRIBUTION BY GAIL**

### **8. (i). Distribution of Piped natural gas (PNG) to Households**

8.(i)(a) The Committee desired to know about present position with regard to supply of piped natural gas to various cities in the country. In reply GAIL stated as under: -

“At present, Piped Natural Gas (PNG) is being made available by Indraprastha Gas Limited (IGL) and Mahanagar Gas Limited (MGL) in households in certain localities in Delhi and Mumbai respectively. Besides this, PNG is also being supplied to certain areas in Gujarat and Assam. The extension of PNG supplies to other areas would depend upon the availability of gas, setting up of infrastructure facilities and economic viability.”

8.(i)(b) Asked as to what are the plans to supply PNG to the entire household of Delhi, GAIL in the note stated as under: -

“During 2006-07, IGL has planned to provide around 30,000 PNG connections in various areas of Delhi. As on August 01, 2006, IGL has provided 53,071 domestic PNG connections.

IGL has already covered a number of areas in NCT of Delhi and proposes to cover all areas of Delhi in phases in the coming years. New colonies are added every year depending upon the possibilities of expansion of PNG network and demand/ response from prospective customers besides the technical feasibility.

Grant of permission for laying gas pipelines in the NCT of Delhi is the biggest hurdle in the expansion of network for providing PNG connections in the colonies. However, there is a continuous endeavour on the part of the IGL to expand its PNG network in more and more areas in NCT of Delhi in the coming years.”

8.(i)(c) As regards future plans GAIL stated that it has identified 28 cities for implementation of city gas distribution projects on the basis of most polluted cities identified by Supreme Court and other cities close to GAIL pipeline network on the basis of business need and project viability. The names of these cities are:

-

#### **A. Cities identified by Hon'ble Supreme Court as air polluted cities:**

1. Agra
2. Lucknow
3. Kanpur
4. Varanasi
5. Pune
6. Faridabad
7. Patna
8. Ahmedabad
9. Sholapur
10. Hyderabad
11. Bangalore
12. Kolkata
13. Chennai

**B. Business need based on project viability:**

1. Allahabad
2. Bareilly
3. Jhansi
4. Mathura
5. NOIDA
6. Navi Mumbai
7. Gwalior
8. Indore
9. Ujjain
10. Rajamundry
11. Vijayawada
12. Rajkot
13. Surendranagar
14. Kota
15. Vadodara

8.(i)(d) As regards covering other cities, GAIL stated that other metropolitan cities may be considered in future subject to viability and development of interstate trunk pipeline network in close vicinity of the city and availability of natural gas.

In a subsequent note, GAIL further stated as under:

“GAIL attaches special importance to retail marketing of natural gas through city gas distribution networks and intends to cover 10-11 cities through joint ventures with an investment of Rs. 1000 to 1250 Crores over the next 8 years.”

The Committee were also informed that a draft pipeline policy is being finalized which inter alia has detailed provisions regarding city distribution of gas.

### **8.(ii). Supply of CNG (for vehicles) to cities**

The Committee note that the entire public transport system of Delhi to day runs on CNG.

During evidence, Committee referred to a Supreme Court order which inter alia stipulated that CNG must be supplied to the city of Pune by the year 2006 and asked as to what steps were being taken so as to start CNG supply to Pune. In reply CMD GAIL during his evidence before the Committee stated as under.

“The position is to bring CNG to Pune. We have formed a new joint venture company called Maharashtra Natural Gas Limited (MNGL) with Bharat Petroleum Corporation Limited. Our people are already posted in the city of Pune. I was there two weeks back; I have taken a review. Originally the gas was to come from Dahej in Gujarat through Dahej-Uran pipeline. It is a question of 120 kilometres to Pune. Unfortunately, for a whole variety of reasons, this whole pipeline project got delayed by a year. Currently the project is working on a fast track. We would not only be taking it to Uran but also Dabhol city westward and to Pune eastward. The commitment is to complete the pipeline up to Dabhol by March, 2007 and up to Pune by June, 2007. In other words, we would very optimistically expect that in the Month of July, 2007 you are expected to see some vehicles running on CNG in the city of Pune. This recent delay was avoidable but it has happened. As a result, now, the date has shifted by a year.”

**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.**

## **9.SHORTAGE OF RICH GAS TO HVJ BASED PLANTS**

The Committee were informed that five LPG HVJ based plants which are currently operating very efficiently and producing higher than their design conditions would be facing shortage of rich gas in future.

9.1. Asked to explain the reasons due to which these plants would be facing shortage of rich gas, GAIL in their note stated as under:

“As per the projections of the ONGC, gas supplies from the south basin fields, which supply gas to the HVJ pipeline system, is projected to progressively go down from the level of 28.38 MMSCMD in 2007-08 to 3.88 MMSCMD in 2014-15, which is a 86% decline in rich gas availability in seven years. Due to such a drastic decline in gas availability, the gas processing units along the HVJ system may be forced to idle one after another in future, if alternative supplies of rich gas are not ensured. It may be mentioned that, in order to ensure rich gas supplies to HVJ based facilities, rich LNG was contracted for the Dahej project in 1999. Subsequently, currently, rich R-LNG from Dahej is entering the HVJ system. However, there are plans by ONGC to extract C2/C3 from rich LNG at Dahej from 2009 onwards. Under such circumstances, it would be desirable to revise, on merit, the earlier decision of the government to permit ONGC to extract C2/C3 from LNG at Dahej. Otherwise, a total investment of Rs.4, 000 crores on the gas processing facilities of GAIL along the HVJ system, would stand exposed to the threat of turning into non-performing assets.”

9.2 GAIL in their subsequent note stated as follows:-

“LNG rich in C2 & C3 was initially sourced from Ras Gas, Qatar with a view to supporting GAIL’s process plants along the HVJ pipeline. This was specially required in view of depleting gas reserves on the western coast of the country. However, Ministry of Petroleum & Natural Gas has subsequently decided that extraction of C2/C3 from first 5 MMTPA of LNG at Dahej will be done by ONGC and GAIL will utilize the next 5 MMTPA of LNG from Dahej for extraction of C2/C3 at its process plants along the HVJ pipeline. This separation of LNG at Dahej amongst ONGC and GAIL, however, may not be technically easy. Moreover, the above arrangement would require sourcing of additional 5 MMTPA of LNG for Dahej which is yet to be accomplished.

In view of the above, GAIL has requested the Ministry of Petroleum & Natural Gas time and again to review the permission given to ONGC for setting up of C2-C3 extraction plant at Dahej. ONGC, it is understood, has not yet started physical execution of their C2/C3 extraction facility at Dahej. Reallocation of 5 MMTPA of LNG from Dahej for extraction of C2/C3 at GAIL’s process plants would definitely help GAIL to support the

entire investment of Rs. 4000 crore made in the process plants along HVJ pipeline. “

9.3 Committee asked the Ministry of Petroleum and Natural Gas to give reasons for permitting ONGC for setting up of C-2/ C-3 extraction plant at Dahej which as stated by GAIL would be detrimental to their interest:. In reply, the Ministry in their note stated as under:

“M/s Petronet LNG Ltd. (PLL) has been promoted by GAIL, ONGC, IOC and BPC. ONGC had contended that while the other promoters of PLL, namely GAIL, IOC and BPC, have been allocated marketing rights of marketing RLNG from Dahej Terminal, giving them opportunity for incremental profitability, no such benefit is available to the fourth promoter of PLL i.e. ONGC. Further, while considering various measures for cost reduction, the Government had allowed ONGC for setting up C-2/ C-3 extraction facility from the first tranche of 5 MMTPA LNG; ONGC will pay 15 Cents/MMBTU as royalty for this. Consequent upon expansion of Dahej LNG terminal, the next tranche of subsequent quantity of LNG brought by PLL will be earmarked to GAIL for extraction of C2/C3.”

9.4 Explaining the dispute between ONGC and GAIL regarding the unequal competition with regard to the rich gas from Qatar, the representatives of Ministry of Petroleum clarified as under: -

“Sir, I think, your question is regarding dispute between ONGC and GAIL. It is not for buying of the gas from Qatar but the gas which is coming as LNG at Dahej and after regasifying it will be transported to DVPL pipeline which is feeding to the process plants and petro-chemical plants along with HVJ pipeline.

It so happened that we already invested about Rs.4,000 crore in the gas extraction of LPG along with HvJ and also one petro-chemical plant near Pata plant and C2, C3 which are rich components which are coming along with LNG. Recently, ONGC Board has cleared this project for extraction of C2, C3 which has just started from initial work and which may affect the processing plant operation. We have also taken up the expansion of petro-chemical plant at Pata, which will be completed by March 2007.

This particular issue has been discussed with ONGC and also in the Ministry. The Secretary was quite helpful in that. We had a dialogue with the Chairman of ONGC recently. He is quite considerate and he said we will discuss and resolve this issue. He said, since the plants which are already set up along with HBJ, they are also not interested to starve those plants. He said we will resolve this issue. So, we will discuss and resolve this issue.”

**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 crore 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.**

## **10. GAS PRICING POLICY**

10.1 The Committee note that Indian Gas Market is governed by different prices regimes namely Administered price mechanism and free market price mechanism. The Administrative price mechanism allows differential pricing based on end use. Asked to give reasons for non-regulation of gas prices, GAIL in their note stated as under:-

“To attract private and multinational investments in exploration and production, the Govt. of India has allowed, under various NELP rounds, gas prices to be based on market price and permitted the producers to negotiate with buyers. Therefore, as on date, there is no direct regulation of prices for all gases other than APM regulated domestic gas produced by ONGC/OIL which involves a limited volume of 55 MMSCMD.”

10.2 On this issue, the Secretary, Ministry of Petroleum and Natural Gas during the oral evidence before the Committee submitted as follows:-

“Natural gas today, as I said, is produced locally, and it is also imported in the form of LNG and pipeline gas. It is difficult to arrive at a uniform pricing sector-wise as well as source wise. Last year, for instance, the gas price which was stated internationally was quoting around 9 dollars per million BTU. Today the price is being quoted around 6.2 to 6.5 dollars per million BTU. Just like the international crude price, gas price has also really started moving in tandem now, as I said, with increasing mobility. The domestically produced gas, till 1997, if I am right, was being supplied at the administered pricing mechanism of the Government. Once the New Exploration Licensing Policy came, since we had to invite a lot of investment in this growing sector, we had to come out with our own pricing policy according to the provisions of the production sharing contract. Now, when we import gas as LNG, our sources are very limited. There are only four or five countries which really have the capacity to produce LNG. So, the price is quoted by them. When we have to buy from them we normally prefer to enter into a long-term contract which sets out the provisions for pricing. For instance with Qatar, we have entered into a long-term contract for 25 years in accordance with the pricing formula. With Iran, now we are negotiating. In fact, all the other terms have been almost finalised; it is the pricing which is now really forming the focus of discussion. We already had three rounds of discussions. When we import pipeline gas, likewise, for instance Myanmar just last month asked the neighbouring countries to quote a price, to give the bid for the gas which they were willing to supply. We have also put in our bid. Thailand has put in the bid, China has put in the bid and Korea has also put in the bid. So, different countries have different basis for determination of the gas price. Here, what we do is, we have set up a Committee in the Ministry to come out with a transparent policy framework which will provide the basis and the guidelines for determination of price.

We will not say that gas will be priced at 2.54 dollars or 1.86 dollars; we will see the basis on which the price is to be arrived at should be transparent enough. That is what the Committee will seek out to do. We expect that the Committee's report will become available over the next one month or so. This is based on a very widespread consultation with all the stakeholders."

He further added:-

"The high-powered Pricing Committee which has been constituted is expected to come out with a clear set of guidelines. The main idea is to provide and ensure that the pricing is fixed in a transparent basis. It should be clearly readable, monitorable and verifiable. I think, these are some of the parameters which we have to take into account".

**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.**

## **11. REGULATOR**

11.1 The Petroleum and Natural Gas Regulatory Board Act, 2006 was notified by the Government in April 2006. The Act inter alia stipulates for setting up of a Regulatory Board Authority for downstream operations like transportation, distribution, marketing, processing, storage etc. of natural gas. The Board is yet to be constituted.

11.2 When asked to state the reasons for the delay in the appointment of the Regulator, the Ministry in their written reply stated as follows:

“After the notification of the Petroleum and Natural Gas Regulatory Board (PNGRB) Act 2006 in April 2006, the process of framing rules under Section 60 of the Act was initiated. Regulations on various issues under Section 61 of the Act were also drafted; the same may be considered for adoption by the PNGRB, as and when the same is established.

The Petroleum and Natural Gas Regulatory Board (Salaries, Allowances and other Conditions of Services of the Chairperson and the Members) Rules, 2006 were finalized in consultation with Department of Personnel and Training, Law Department and Department of Expenditure. We have also prepared a note for the consideration of the Cabinet Committee on Accommodation (CCOA) for earmarking office accommodation for PNGRB, and making Chairperson and Members of the Board eligible for Government accommodation as per their entitlement in terms of their pay scales. The CCOA is yet to consider this proposal. In case CCOA approves our proposal, the rules will be modified accordingly.

Thus a lot of preparatory work was required to be done before notifying the Search Committee for selecting Chairperson and Members of the Board. The Search Committee has been notified on 31.8.2006. The Search Committee is expected to submit its recommendations to the Government in near future.”

**The Petroleum & Natural Gas Regulatory Board Act, 2006 which inter-alia stipulate 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 their PNGRB and appoint regulator without any further delay.**



## **12. SAFETY MEASURES**

12.1 On the safety measures taken by the Company , GAIL in their note stated as under:

“The company has accorded highest priority and importance to safety in pipelines, installations and process plants at every stage. GAIL continues to strive for zero accident in all its units. GAIL ensures safety right from planning and design / construction stages to operation & maintenance and has established a Safety Management System which is being complied with at all the installations. The notable safety measures of the company are as follows:

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

24. Adherence to established management of change procedure for any modifications in the plants
25. Established system for control of defeat and reliability of critical systems and devices
26. Effective monitoring of third party services”.

12.2 The Committee were also informed that GAIL has all along accorded highest priority to maintenance of highest standards of safety in all its industrial installations. In recognition to its efforts in this regard, the company has earned several safety awards and laurels from various national and international bodies.

12.3 Asked about the number of accidents or casualties occurred during each of the last three years, compensation paid to the victims, causes of each accident and steps taken to obviate recurrence of such accidents in future , GAIL gave following details.

Details of accidents occurred during 2003-06:

<b>Year</b>	<b>No. of accidents/ casualties</b>	<b>Death</b>	<b><u>Injury</u></b>	<b><u>Compen- sation</u></b>	<b>Cause</b>	<b>Preventive measures taken</b>
2003	Fire due to gas leak in Gandhar Dhuwaran P/I on 26.04.03	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 12.03.04	1 contract worker	Nil	Refer Note 1	Electrocution while checking bus bar of isolated panel	1. Contractor to ensure safety briefing given to all workers 2. Supervision done by GAIL executives 3. Electrical lockout permit system reviewed
	Electrocution at construction site on Agartala on 06.07.04	1 contract worker	Nil	Refer Note 1	Electrocution	1. Temporary switch boards/panels protected from rain water 2. PPE use ensured 3. Safety briefing given to workers at site

	Fire incident in LPG Phase 1 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 style="list-style-type: none"> <li>1. Job to be covered under hot work permit</li> <li>2. Jobs performed at odd hours should be approved by General Manager</li> <li>3. Job to be carried in presence of GAIL executive.</li> </ol>
2005	Fire incident at Pata Petrochemical complex on 29.04.05	Nil	Burn injury to 1 GAIL employee	Rs. 92,800/-	Leakage of cyclohexane	<ol style="list-style-type: none"> <li>1. Proper risk assessment done before any hazardous job</li> <li>2. Open hydrocarbons 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</li> <li>3. Jobs involving fire hazards, if done at odd hours should be with the approval of GM/OIC.</li> <li>4. Procedures established for all non routine jobs</li> </ol>
	Minor fire due to gas leak in DESU-Maruti P/I on 10.08.205	Nil	Nil	NA	Gas leak from pipeline puncture caused by localized heating by passing overhead 30 KV surge diverter cable	Study carried out and after initial study 11 KV cable was taken away by about 2 feet from 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 11.09.2005	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 30.09.05	Nil	1 contract employee	Refer Note 1	Fall from height	Stringent use of safety belt for work at height
2006 (till date)	Minor fire/gas leak in 8" diameter Natural Gas Pipeline at Firozabad on 19.8.06	Nil	Nil	Nil	Passing of fault current through pipeline originated from 11 KV overhead conductor, puncturing pipeline and leading to fire.	<ol style="list-style-type: none"> <li>1. A Survey was done to locate erected electrical poles in close proximity to gas pipelines</li> <li>2. .Electrical poles shifted to distance from pipeline. Wherever, not feasible insulation provided between pipeline and poles.</li> </ol>
	Flash fire in HT panel & burn injury to one employee at IPS, Mansarampura on 24.8.06	Nil	Burn injury to one GAIL employee (no disablement)	Claim lodged with Insurance company (approx. Rs.30,000)	Exposure to flash fire in HT panel while isolation/ maintenance	<ol style="list-style-type: none"> <li>1. Strict implementation of electrical isolation procedure</li> <li>2. Provision of rubber mats on floor while working on</li> </ol>

						such panels
	Minor fire/gas leakage in 2" diameter NG pipeline at Fizoabad on 11.9.06	Nil	Nil	Nil	Passing of fault current through pipeline originated from 11 KV overhead conductor puncturing pipeline and leading to fire	<ol style="list-style-type: none"> <li>1. Close proximity electrical poles shifted away.</li> <li>2. Insulation provided between pipeline and electrical poles, wherever shifting was not feasible.</li> </ol>

**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.**

## PART – II

### RECOMMENDATIONS/OBSERVATIONS OF THE COMMITTEE

#### RECOMMENDATION NO. 1

##### INTRODUCTION

##### Historical background and present activities

**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 petro-chemical 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 trans-national 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.



## **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 & Natuiral 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.

### **RECOMMENDATION NO. 3**

#### **PERFORMANCE OF THE COMPANY**

##### **3(i). 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-tying-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.

### **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'.

### 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.**

## **RECOMMENDATION NO. 4**

### **GAS EXPLORATION BY GAIL**

**GAIL was set-up 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 operator-ship 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.**

## **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 have been dealt with as under:

#### **(i). Import of gas through transnational pipelines**

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-

**Afganistan-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.**

**(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.

### (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.**

## **RECOMMENDATION NO. 6**

### **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.

#### **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.

#### **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 to 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.



## **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.

## **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.**

**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 crore 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.

## **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.

**RECOMMENDATION NO. 11**

**REGULATOR**

The Petroleum & Natural Gas Regulatory Board Act, 2006 which inter-alia stipulate 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.

## **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.

New Delhi  
12 December, 2006  
21 Agrahayana, 1928(S)

**RUPCHANDPAL**  
**CHAIRMAN**  
COMMITTEE ON PUBLIC UNDERTAKINGS

**MINUTES OF THE 4<sup>th</sup> SITTING OF THE COMMITTEE ON PUBLIC  
UNDERTAKINGS HELD ON 23 August, 2006**

The Committee sat from 1500 hrs to 1645 hrs.

**CHAIRMAN**

Shri Rupchand Pal

**MEMBERS LOK SABHA**

2. Shri Manoranjan Bhakta
3. Smt. Sangeeta Kumari Singh Deo
4. Dr. M. Jagannath
5. Shri Suresh Kalmadi
6. Smt. Praneet Kaur
7. Shri Shrinivas Patil
8. Shri Kashiram Rana
9. Shri Ramjilal Suman
10. Shri Bagun Sumbrui

**MEMBERS RAJYA SABHA**

11. Shri Ajay Maroo
12. Shri. K. Chandran Pillai

**SECRETARIAT**

- |    |                     |                 |
|----|---------------------|-----------------|
| 1. | Shri S. Bal Shekar, | Joint Secretary |
| 2. | Shri N. C. Gupta,   | Under Secretary |
| 3. | Shri Ajay Kumar,    | Under Secretary |

**REPRESENTATIVES OF GAIL (INDIA) LTD.**

- |    |                          |                              |
|----|--------------------------|------------------------------|
| 1. | Shri Proshanto Banerjee, | Chairman & Managing Director |
| 2. | Shri S.P.Rao,            | Director (Project)           |
| 3. | Shri B.S.Negi,           | Director (BD)                |
| 4. | Shri M.R.Hingnikar       | Director (HR)                |
| 5. | Dr. U.D.Choubey,         | Director (Marketing)         |
| 6. | Shri R.K.Goel,           | Director (Finance)           |



2. The Committee took oral evidence of the representatives of GAIL(India) Ltd. in connection with comprehensive examination of GAIL (India) Limited which has been selected as a subject for examination during the year 2006-2007.

3. At the outset, the Chairman welcomed the representatives of GAIL (India) Ltd. Thereafter, Members raised queries on various aspects pertaining to the subject and the explanations/clarifications on the same were made by the representatives of GAIL(India) Ltd.. Information on some of the points raised by the Committee was not readily available with the representatives of GAIL (India) Ltd. It was, however, promised by them that the same would be furnished to the Committee Secretariat in due course.

4. The Chairman then thanked the representatives of GAIL(India) Ltd. for providing all the information on the subject matter as desired by the Committee.

5. A copy of the verbatim proceedings has been kept on record separately.

6. The witnesses then withdrew.

7. The Committee then adjourned.

**MINUTES OF THE 7<sup>th</sup> SITTING OF THE COMMITTEE ON PUBLIC  
UNDERTAKINGS HELD ON 26<sup>th</sup> SEPTEMBER, 2006**

The Committee sat from 1030 hrs to 1215 hrs.

**CHAIRMAN**

Shri Rupchand Pal

**MEMBERS - LOK SABHA**

2. Shri Manoranjan Bhakta
3. Shri Gurudas Dasgupta
4. Dr. Vallabhabhai Kathiria
5. Shri Shrinivas Patil
6. Shri Kashiram Rana
7. Shri Mohan Rawale
8. Shri Ramjilal Suman
9. Shri Bagun Sumbrui
10. Shri Ram Kripal Yadav

**MEMBERS - RAJYA SABHA**

11. Shri Ajay Maroo
12. Shri Shahid Siddiqui
13. Ram Deo Bhandari
14. Shri Dinesh Trivedi

**SECRETARIAT**

- |    |                   |                 |
|----|-------------------|-----------------|
| 1. | Shri J.P. Sharma  | Joint Secretary |
| 2. | Shri N. C. Gupta, | Under Secretary |
| 3. | Shri Ajay Kumar,  | Under Secretary |

**REPRESENTATIVES OF MINISTRY OF PETROLEUM & NATURAL GAS**

- |    |                       |                      |
|----|-----------------------|----------------------|
| 1. | Shri M.S. Srinivasan  | Secretary            |
| 2. | Shri Ajay Tyagi       | Joint Secretary      |
| 3. | Shri Many Srivastava  | Director             |
| 4. | Shri S.B. Mandal,     | Under Secretary      |
| 5. | Shri Deepak Rattanpal | Under Secretary      |
| 6. | Shri S.P. Rao         | C&MD                 |
| 7. | Shri B.S. Negi        | Director (BD)        |
| 8. | Dr. U.D. Choubey      | Director (Marketing) |
| 9. | Shri S.K. Vaid,       | DGM (Coord)          |

2. The Committee took oral evidence of the representatives of the Ministry of Petroleum & Natural Gas in connection with the comprehensive examination of GAIL (India) Limited, which has been selected as a subject for examination during the year 2006-2007.

3. At the outset, the Chairman welcomed the representatives of Ministry and also drew their attention to direction 58 of the Directions by the Speaker relating to evidence before the Parliamentary Committee. Thereafter, members raised queries on various aspects pertaining to the subject and the explanations/clarifications on the same were made by the representatives of Ministry of Petroleum & Natural Gas. Information on some of the points raised by the Committee was not readily available with the representatives of Ministry of Petroleum & Natural Gas. It was, however, promised by them that the same would be furnished to the Committee Secretariat in due course.

4. The Chairman then thanked the representatives of Ministry for providing all the information on the subject matter as desired by the Committee.

5. A copy of the verbatim proceedings has been kept on record separately.

6. The witnesses then withdrew.

7. The Committee then adjourned.

**MINUTES OF THE 13<sup>th</sup> SITTING OF THE COMMITTEE ON PUBLIC  
UNDERTAKINGS HELD ON 12<sup>th</sup> DECEMBER, 2006**

The Committee sat from 1600 hrs to 1630 hrs.

**CHAIRMAN**

Shri Rupchand Pal

**MEMBERS**

**LOK SABHA**

2. Shri Manoranjan Bhakta
3. Shri Gurudas Dasgupta
4. Dr. Vallabhabhai Kathiria
5. Smt. Preneet Kaur
6. Shri Kashiram Rana
7. Shri Ram Kripal Yadav
8. Shri Bagun Sumbrui
9. Dr. M. Jagannath
10. Shri Shriniwas Patil
11. Shri Ramjilal Suman

**MEMBERS**

**RAJYA SABHA**

12. Shri Ajay Maroo
13. Shri K. Chandran Pillai

**SECRETARIAT**

- |    |                    |                 |
|----|--------------------|-----------------|
| 1. | Shri J. P. Sharma, | Joint Secretary |
| 2. | Shri N. C. Gupta,  | Under Secretary |
| 3. | Shri Ajay Kumar    | Under Secretary |

**OFFICE OF THE COMPTROLLER & AUDITOR GENERAL OF  
INDIA**

Shri A. K. Avasthi,

Director General(Commercial)

2. The Committee considered the Draft Reports on (i) xxxxxxxx and  
(ii) GAIL(India) Limited

3. The Committee authorized the Chairman to finalise the Reports for  
presentation.

4. xxx xxx xxx xxx xxx

The Committee then adjourned.