

STANDING COMMITTEE ON PETROLEUM & NATURAL GAS (2021-22)

(SEVENTEENTH LOK SABHA)

MINISTRY OF PETROLEUM & NATURAL GAS

[Action Taken by the Government on the recommendations contained in the Eleventh Report (Seventeenth Lok Sabha) of the Standing Committee on Petroleum and Natural Gas (2021-22) on the subject 'National Gas Grid Including PNG and CNG']

FIFTEENTH REPORT



LOK SABHA SECRETARIAT NEW DELHI

August, 2022/Shravana, 1944 (Saka)

CP&NG NO.

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Presented to Lok Sabha on 08.08.2022

Laid in Rajya Sabha on 08.08.2022



LOK SABHA SECRETARIAT NEW DELHI

August, 2022/Shravana, 1944 (Saka)

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COMPOSITION OF THE STANDING COMMITTEE ON P&NG (2021-22)

SI. No.

Names of Members LOK SABHA

Shri Ramesh Bidhuri - Chairperson

- 2 Smt. Chinta Anuradha
- 3 Shri Ramesh Chand Bind
- 4 Shri Pradyut Bordoloi
- 5 Shri Girish Chandra
- 6 Shri Topon Kumar Gogoi
- 7 Shri Naranbhai Kachhadiya
- 8 Shri Santosh Kumar
- 9 Shri Rodmal Nagar
- 10 Shri Mitesh Rameshbhai (Bakabhai) Patel
- 11 Shri Unmesh Bhaiyyasaheb Patil
- 12 Shri M.K. Raghavan
- 13 Shri Chandra Sekhar Sahu
- 14 Shri Dilip Saikia
- 15 Dr. Bharatiben Dhirubhai Shiyal
- 16 Shri Janardan Singh Sigriwal
- 17 Shri Lallu Singh
- 18 Shri Vinod Kumar Sonkar
- 19 Shri Ajay Tamta
- 20 Dr. Kalanidhi Veeraswamy
- 21 Shri Rajan Baburao Vichare

RAJYA SABHA

- 22 Shri Birendra Prasad Baishya
- 23 Smt. Kanta Kardam
- 24 Shri Rambhai Harjibhai Mokariya
- 25 Shri Subhas Chandra Bose Pilli
- 26 Dr. V. Sivadasan
- 27 Vacant¹
- 28 Vacant²
- 29 Vacant³
- 30 Vacant⁴
- 31 Vacant⁵

SECRETARIAT

-

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- 1 Shri Y.M. Kandpal
- 2 Shri H. Ram Prakash
- 3 Shri Brajesh Kumar Singh
- 4 Shri Deepak Kumar

- Joint Secretary
- Director
- Deputy Secretary
 - Assistant Executive Officer

¹ Since Shri Ripun Bora, MP (RS) retired on 02.04.2022.

² Since Shri Om Prakash Mathur, MP (RS) retired on 04.07.2022.

³ Since Shri Surendra Singh Nagar, MP (RS) retired on 04.07.2022.

⁴ Since Shri A. Vijayakumar, MP (RS) retired on 29.06.2022.

⁵ Since Ch. Sukhram Singh Yadav, MP (RS) retired on 04.07.2022.

INTRODUCTION

I, the Chairperson, Standing Committee on Petroleum & Natural Gas having been authorised by the Committee to submit the Report on their behalf, present this Fifteenth Report on Action Taken by the Government on the recommendations contained in the Eleventh Report (Seventeenth Lok Sabha) of the Committee on the subject 'National Gas Grid Including PNG and CNG'.

2. The Eleventh Report of the Standing Committee on Petroleum & Natural Gas was presented to Lok Sabha/ laid on the table of Rajya Sabha on 25.03.2022. The Action Taken Replies of the Government to all the recommendations contained in the Eleventh Report were received on 14.07.2022.

3. The Standing Committee on Petroleum & Natural Gas (2021-22) considered and adopted the Report at their sitting held on 04.08.2022.

4. An analysis of the action taken by the Government on the recommendations contained in the Eleventh Report (Seventeenth Lok Sabha) of the Standing Committee on Petroleum & Natural Gas is given in Annexure-II.

5. For facility of reference and convenience, the observations and recommendations of the Committee have been printed in bold letters in the body of the Report.

6. The Committee place on record their appreciation for the valuable assistance rendered to them by the officers of the Lok Sabha Secretariat attached to the Committee.

New Delhi; <u>04 August, 2022</u> 13 Shravana, 1944 (Saka) RAMESH BIDHURI, Chairperson, Standing Committee on Petroleum & Natural Gas.

REPORT

CHAPTER I

This Report of the Standing Committee on Petroleum and Natural Gas deals with the action taken by the Government on the recommendations contained in the Eleventh Report (Seventeenth Lok Sabha) of the Standing Committee on Petroleum and Natural Gas (2021-22) on the subject "National Gas Grid including PNG and CNG" of the Ministry of Petroleum and Natural Gas, which was presented to Lok Sabha and laid in Rajya Sabha on 25.03.2022.

2. Action Taken Notes have been received from the Ministry on 14.07.2022 in respect of all the 16 recommendations/observations contained in the report. These have been categorized as per the following:

(i) Recommendations/Observations that have been accepted by the Government:-Reco. Nos. 1, 2, 4, 5, 6, 8, 9, 11,12,13,14 and 15 (Total -12)

(Chapter-II)

(ii) Recommendations/Observations which the Committee do not desire to pursue in view of the Government's replies:- Nil

(Chapter-III)

(iii) Recommendations/Observations in respect of which replies of the Government have not been accepted by the Committee:- Reco. Nos. 3, 10 and 16 (Total - 03)

(Chapter- IV)

(iv) Recommendations/Observations in respect of which final replies of the Government are still awaited:- Reco. No. 7 (Total-01)

(Chapter-V)

3. The Committee desire that the Action Taken Notes on the Recommendations/Observations contained in Chapter-I of this Report and Final Replies in respect of the recommendations for which interim replies have been furnished by the Government (included in Chapter-V), should be furnished expeditiously.

4. The Committee will now deal with the action taken by the Government on some of their recommendations.

Recommendation No. 2

Single-Window Fast Track System for approvals/clearances

5. The Committee had recommended as under:

"The Committee note that the laying of pipelines have been delayed due to multiplicity of agencies involved in granting clearances and permissions. The Committee also observe that there have been delays in RoU notification, rate determination, demand of higher compensation rates and due to non-availability of land ownership records with many State Governments.

National Gas Grid project is of national importance and therefore, there is a need to bring uniformity in permissions and clearances from various central / state / local bodies/departments to lay pipeline network. The Committee exhort the Ministry / PNGRB to consider issuing a blanket approval for pipeline laying, with a half-yearly/yearly reconciliation mechanism and a forum for joint consultative mechanism involving elected representatives from local and at state/district level should be evolved to iron out all the differences arising among various agencies and in this regard, there can be a Infrastructure Approvals Committee at State/District level which can take up such clearances and fast track them. The Committee, therefore, recommend that the Ministry/PNGRB should bring out a mechanism for a single-window fast track system which will help in reducing the time to process such permissions".

6. In this regard, the Ministry has submitted the following reply:

"The matter regarding various statutory approvals for laying Natural Gas Pipelines is under the purview of the State Governments or other Central Ministries. This Ministry has taken up with State Governments and other Central Ministries for considering creation of a single window system for providing various permissions for development of CGD and Pipeline infrastructure".

> Ministry of Petroleum & Natural Gas O.M.No.L-15016/2/2021-GP-II, dated 14th July, 2022

Comments of the Committee

7. The Committee in its Report had noted that the laying of pipelines get delayed due to multiplicity of agencies involved in granting clearances and permissions, delays in RoU notification, rate determination, demand of higher compensation rates and due to non-availability of land ownership records with many State Governments. The Committee are satisfied to note that Ministry has taken up with State Governments and other Central Ministries for considering creation of a single window system for providing various permissions for development of CGD and Pipeline infrastructure. In this regard, the Committee would like the Ministry to come up with the consultative mechanism to resolve the major bottlenecks plaguing the pipelines and simultaneously work towards developing a software so that all the

stakeholders can participate and contribute in evolving the mechanism for single window system for providing various permissions for development of CGD and Pipeline infrastructure. The Committee would also like the Ministry to liaise with the various agencies to evolve the single window mechanism at the earliest and expedite the process in a time bound manner.

Recommendation No. 3

Gas Grid Infrastructure

8. The Committee had recommended as under:

"The Committee note that pipelines are being laid across the country under National Gas Grid project to transport gas and spur lines from these trunk pipelines are being drawn to take gas to end-user. The country is having a total length of about 20,227 kms operational pipelines and about 15,500 kms of additional pipeline are to be added by 2024-25. The Committee further note that spur lines from these trunk pipelines are being drawn to take gas to the end users.

The Committee although impressed with the expansion of pipeline infrastructure are concerned to note that the work on Haldia-Jagdishpur Pipeline, Kochi-koottanad-Bengaluru-Mangaluru Pipeline(KKMPL) and Angul-Srikakulam Pipeline has been delayed for various reasons like demands for higher compensation by farmers, issues of right of use (RoU), forest clearance, etc. These projects are of national importance in building a stable energy security architecture for the country. There have been some instances where the State Governments in the above pipeline projects have been less than enthusiastic towards completing these projects.

The Committee are of the strong view that National Gas Grid is central to development of gas distribution networks in the country and it is essential that the completion schedule of these trunk pipelines should be strictly adhered to. The Committee expresses their unhappiness on the delay on the laying of important trunk pipelines in few stretches which adversely affects the connected portion of the national gas grid. The Committee, therefore, recommend that the Ministry of MoPNG should evolve and devise better coordination mechanism for the active involvement of the State Governments to complete the laying of pipeline infrastructure in a time bound manner and also to ensure accountability of different stakeholders".

9. In this regard, the Ministry has submitted the following reply:

"The review of progress of pipeline is being done by the Ministry at various levels on a regular basis. In case any assistance/support is required by the entities w.r.t. permissions, clearances etc at state level or central level, the Ministry takes up with the concerned authority for early resolution".

> Ministry of Petroleum & Natural Gas O.M.No.L-15016/2/2021-GP-II, dated 14th July, 2022

Comments of the Committee

10. The Committee in its Report had recommend that the Ministry of MoPNG should evolve and devise better coordination mechanism for the active involvement of the State Governments to complete the laying of pipeline infrastructure in a time bound manner and also to ensure accountability of different stakeholders. However, the Committee note that the reply of the Ministry is silent on efforts being made by the Ministry and instead have mentioned the current practice being followed for monitoring the programmes of pipeline projects. The Committee, therefore, reiterate the recommendation and desire that the Ministry should evolve a project monitoring mechanism in which all the stakeholders may be brought under one group so that the project can be monitored and implemented in a time bound manner and also interventions at the right time can be made. The Committee may be apprised of the action taken in this regard.

Recommendation No. 4

Demand and Supply of Natural Gas

11. The Committee had recommended as under:

"The Committee note that Natural Gas has emerged as one of the important source of energy in the world. Due to its inherent advantages over other fossil fuels, there is a global trend to shift in energy mix towards to natural gas. However, in case of India, share of natural gas in total energy mix currently accounts only 6 percent as against global share of 24.2 percent. As the Government has been adopting policies to boost economic growth and the demand for natural gas is only going to increase by 2030. The Committee observe that this rise in demand will widen the gap between demand and supply of gas in the country. Unless domestic production is increased from or due to new discoveries the demand has to be met through LNG imports. However, these imports are also subject to price fluctuations in the international market.

The Committee are of the view that MoPNG should evolve a plan to explore all possible options to increase the domestic production and supply of natural gas in the country. Towards this end, the Committee desire that the Ministry should increase the blocks awarded for exploration, intensify activities for exploration and production from already discovered fields and pursue strong diplomatic efforts to expedite construction of transnational pipelines from neighbouring regions to bring gas and try to enter into longer term contract with countries for import of natural gas/LNG at economic cost. The Committee further desire that unconventional sources of gas like Gas Hydrates, CBM, Shale Gas etc. should be seriously pursued for exploration and development. CBG plants may also be looked at as an important option to fulfill the demand. Therefore, the Committee recommend that Ministry should prepare a blue print and way forward for enhancing the supply and domestic production of natural gas through exploitation of unconventional

hydrocarbons, expediting production activities in awarded blocks along with fiscal and monetary incentives like tax breaks, stable tax regime etc.".

12. In this regard, the Ministry has submitted the following reply:

"India's production for 2021-22 is 29.69 MMT of Oil and 34.02 BCM of Gas. Four strategic priorities have been identified for increasing domestic oil and gas production:

- Enhancement of production from already producing field,
- Speedy execution of FDPs in existing and new fields,
- Monetization of unmonetized fields and discoveries, and
- Augmenting inventory of flowing wells.

Government has undertaken several transformational policy reforms to invigorate the E&P ecosystem and establish a conducive business environment, such as shifting from production sharing contract to revenue sharing contract under Hydrocarbon Exploration and Licensing Policy (HELP) through Open Acreage Licensing Programme (OALP), bidding of discovered fields under Discovered Small Field (DSF) bid rounds, implementation of production enhancement technology through Enhanced Recovery policy, etc. The new policy framework has progressive features such as single license for all forms of hydrocarbons, low regulatory burden through revenue-sharing model, marketing and pricing freedom for oil and gas produced and reduced royalty levels. An early monetization scheme has been put in place to facilitate and encourage commercial production from a new discovery while exploration of the block is still underway.

By 2025, total 5 lakh sq. km. of sedimentary basinal area is sought to be put under E&P activities through award of Exploration blocks under OALP Bidding and by 2030, this sedimentary basinal area under E&P activities is sought to be doubled to 1 million sq km. With comprehensive E&P efforts, new discoveries can be made to sustain and enhance future production.

The seismic survey activities under National Seismic Program commenced in September 2016 and completed in December 2021 by achieving ~97% of the total target. The logistically difficult areas where seismic survey couldn't be carried out, are being taken up through Airborne survey. The generated data will be instrumental in identifying the prospective areas, carving out the blocks in Open Acreage Licensing Policy (OALP) etc.

In a bid to attract further investments in the E&P sector, the government is making the proceptivity perception of Indian Sedimentary efforts to improve basins. Recognizing the significance of geoscientific data towards gaining a better perception of Indian sedimentary basins, Government has ushered data-driven reforms in the sector like the establishment of state-of-the-art National Data (NDR), the launch of National Seismic program Repository (NSP) and the Hydrocarbon Resource Reassessment Survey 2022.

Also, Government is in the process of launching Mission Anveshan for acquisition and assimilation of Geo-scientific data for comprehensive appraisal of the Indian sedimentary basins. The programme will comprise of Acquisition, Processing and Interpretation (API) of geo-scientific data and up-gradation of NDR to cloud-based architecture allowing easy access to data visualization and analysis.

The appraisal program under NSP was planned to cover onland basins. However, in next campaign, offshore basins (East Coast, West Coast and Andaman) upto EEZ boundaries are being taken up. Till February 2022, total 22,555 LKM 2D Broadband seismic data in Andaman offshore has been acquired. The availability of quality data will enable the investors towards making a more informed decision w.r.t. carving of blocks for E&P exploration in India.

Government has launched many investment opportunities, recently, in the form of OALP Rounds, DSF III Round and Special CBM Bid Round to boost E&P activities. The encouraging response has been received from E&P Operators.

A special CBM bid round (SCBM-2021) has been launched in September 2021 by Gol with the offer of 15 CBM blocks under the Hydrocarbon Exploration Licensing Policy through International Competitive Bidding, with roughly 8,500 Sq. Km on offer distributed across 6 states. The Blocks are carved out in consultation with Ministry of Coal resolving the coal block overlap. The prognosticated resource of these blocks is estimated at around 700 BCM.

Under the Shale Gas Policy - 2013, 50 blocks in 4 basins; Assam, Krishna Godavari, Cauvery & Cambay were identified by ONGC and 6 blocks in 2 basins; Jaisalmer and Assam were identified by OIL in the Phase-I of exploration which ended in April-2017. Till FY 2021-22, ONGC had drilled a total of 30 wells in 4 basins and OIL has drilled 4 shale wells in 2 basins.

Gas hydrate exploration in India is steered by the Ministry of Petroleum & Natural Gas under National Gas Hydrate Program (NGHP). Two expeditions, the first in 2006 (NGHP-01) and the second in 2015 (NGHP-02) were undertaken. Under NGHP-01, 39 holes were drilled to explore the presence of gas hydrate at 21 sites in Krishna-Godavari (KG), Mahanadi, Andaman, and Kerala-Konkan Basin. Except Kerala-Konkan, the presence of gas hydrate was established in all three basins, but such gas was proved to be non-exploitable with existing technologies. Under NGHP-02, 42 holes were drilled at 25 sites in KG and Mahanadi Basin. Sand reservoirs with gas hydrate were located at two places in KG Basin and the considered to be prospective for future production testing. International and national experts engaged through MoU under NGHP advised that future production testing should be undertaken in three phases. Phase 1 was proposed to deal with integration and interpretation of data acquired under NGHP-01 & 02 campaigns. Phase-2 would involve acquisition of additional data to better-understand the subsurface integrity required for successful production testing. Phase-3 was proposed to conduct production testing at selected sites. Currently, Phase-1 activities are underway at various places in India, Japan and USA".

> Ministry of Petroleum & Natural Gas O.M.No.L-15016/2/2021-GP-II, dated 14th July, 2022

Comments of the Committee

13. The Committee had recommended that Ministry should prepare a blue print and way forward for enhancing the supply and domestic production of natural gas through exploitation of unconventional hydrocarbons, expediting production activities in awarded blocks along with fiscal and monetary incentives like tax breaks, stable tax regime etc. The Ministry in its reply have enumerated the steps taken for increasing the domestic crude oil and gas production. In this regard, the Committee note the initiatives and efforts being made in exploring the unconventional resources and realising the vision in transforming India into a gas based economy and would expect the Ministry to quantify the production from these initiatives. The Committee would like Ministry to also take steps to simultaneously develop alternate fuel resources and technologies.

Recommendation No. 7

Reorienting the role/power of PNGRB

14. The Committee had recommended as under:

"The Committee note that 238 GAs are covering 400 districts across the country covering approximately 70 percent of the country's Geographical Areas (GA's) and 84 percent of its population with the 11th CGD bidding round.

The Committee observe that with such a network/infrastructure and large number of consumers, the safety of the pipelines and the consumers should be of utmost priority. However, till now PNGRB has a limited role in these areas as it has been empowered in authorizing entities to lay, build, operate or expand city or local natural gas distribution network. There is an urgent need to reorient the mandate of PNGRB on the lines of other regulators and needs to be empowered with monitoring and regulating the entire sector entrusted to them.

The Committee desire that Ministry should review the function of PNGRB and strengthen it further by inducting qualified manpower so as to play a more effective role in regulating the sector. The Committee recommend that Ministry of Petroleum and Natural Gas in coordination with other related Ministries should frame rules and regulations and for enforcement on safety aspects for the oil and gas sector be brought under the supervision and regulation of PNGRB so as to avoid overlapping mandates among various agencies and a centralized framework, would streamline the processes and enforce rules and regulations effectively and reduce the delays. The Committee also desire that necessary changes in legislation be brought out to this effect sooner than later".

15. In this regard, the Ministry has submitted the following reply:

"The recommendations of the committee have been noted and are being examined for the required amendment, if any, in PNGRB (Salary, Allowances and Other Conditions of Services of Officers and employees) Rules, 2020.Further, recommendation w.r.t. rules and regulations and enforcement on safety aspects for oil and Gas sector to be brought under the supervision and regulation of PNGRB is being also being examined by this Ministry".

> Ministry of Petroleum & Natural Gas O.M.No.L-15016/2/2021-GP-II, dated 14th July, 2022

Comments of the Committee

16. The Committee in its report had recommended that Ministry of Petroleum and Natural Gas in coordination with other related Ministries should frame rules and regulations for enforcement on safety aspects for the oil and gas sector and brought under the supervision and regulation of PNGRB so as to avoid overlapping mandates among various agencies and a centralized framework. The Committee had also desired that Ministry should review the function of PNGRB and strengthen it further by inducting qualified manpower so as to play a more effective role in regulating the sector. The Ministry in its reply have stated that the recommendation of the Committee has been noted and being examined for amendments in PNGRB rules, 2020. The reply of the Ministry is silent regarding the regulation and enforcement of safety aspects under the mandate of PNGRB. The Committee are not satisfied with the reply furnished by the Ministry. The Committee reiterate their recommendation and would like the Ministry to take steps with respect to manpower issues and reviewing the rules at the earliest to bring uniformity in implementing safety standards in petroleum sector.

Recommendation No. 10

Need to re-define Coverage in Geographical Areas

17. The Committee had recommended as under: "The Committee are happy to note that the numbers of geographical areas (GAs) have been increasing consistently and 238 GAs are covering 400 districts across the country with a commitment to reach 520 districts, which would cover approximately 70 percent of the country's Geographical area and 84 percent of its population in 11th CGD bidding round.

The Committee note the ambitious targets with concern over the actual number of beneficiaries of these projects. The Committee further note that even when an area has been marked as covered in a particular geographical area, the connections do not reach every household. The definition of declaring a GA does not necessarily mean the coverage to the people in the majority households in that region.

The Committee note that CGD Networks are established based upon the availability of natural gas in their vicinity and Geographical Areas may consist of single district, part district, two or more districts or any such combination without taking into account the actual number of connections.

For instance of Delhi where CGD, network is being handled by IGL since 1998, and only 20 percent to 30 percent of population has access to PNG despite Delhi being divided into 70 charge areas corresponding to 70 assembly constituencies even after more than twenty years.

While expressing satisfaction in the long strides made in the pipeline infrastructure, the Committee are unhappy to note that the parameters of defining coverage in a particular area under a GA remain ambiguous. To reflect the actual penetration in ground reality, it is important to have a proper framework for measuring statistics of beneficiaries. The Committee desire that the Ministry/IGL should quicken the expansion of household connections to uncovered areas in Delhi to achieve 100% connection in GA areas where IGL/MGL Network are already in place. The Committee recommend that penetration levels in each district should be a major criteria of declaring the district as covered under PNG network. The Committee, therefore, also recommend that the coverage should be based on the actual number of households having access to PNG and not simply by virtue of an area being declared a charge area under a GA".

18. In this regard, the Ministry has submitted the following reply:

"The Committee's recommendation regarding declaration of a district as covered under PNG Network has been noted. Further, with regard to the penetration of PNG Domestic Connections in GAs authorized to Indraprastha Gas Limited and Mahanagar Gas Limited, it is submitted that these entities have been increasing the coverage of PNG Domestic Connections in their authorized GAs and have provided 10,68,545 PNG Domestic Connections in the last two years".

> Ministry of Petroleum & Natural Gas O.M.No.L-15016/2/2021-GP-II, dated 14th July, 2022

Comments of the Committee

19. The Committee are not satisfied with the reply of the Ministry regarding the criteria of declaring a district as covered under PNG network as the reply does not mention the action being taken in this regard. The Committee had categorically recommended that the coverage should be based on the actual number of households having access to PNG. The Committee, therefore, reiterate their recommendation and would want that criterion for declaring a district as covered under PNG network should be based on actual number of households having access to PNG and not by virtue of being declaring an area as covered. The Committee though are pleased to note the progress made in the number of PNG connections issued to householders yet they feel that the criteria declaring a district covered under geographical area need to be revised which should be strictly based on the number of households rather than access to pipelines. The Ministry may apprise the Committee about the action taken in this regard within three months.

Recommendation No. 11

Competition in Geographical Areas

20. The Committee had recommended as under:

"The Committee observe that the entities are allowed marketing exclusivity period of certain years from the date of authorization in terms of an exemption from the purview of the contract carrier or common carrier for the respective CGD Network. This deadline has already expired in many areas. The Committee feel that there is an urgent need to review and update for City or Local Natural Gas Distribution Networks be declared as common carrier or contract carrier to provide non-discriminatory open access to third party entities.

It should be opened to increase the competition in providing the Piped Natural Gas (PNG) so as to benefit to the maximum number of people. Also, the people should be given the choice to shift to any operator after the exclusivity period. With the increase in competition, a person will have the choice of availing the connection as and when one wishes and therefore should not be dependent on the CGD entity. The Committee recommend that there is a need for more players to participate in this nascent and growing sector and hence when the exclusivity period is over, the entire process of inviting, allotting and operating of new players should be anticipated and acted well in advance. The Committee further, hope that this will enhance the quality of service and delivery in a particular geographical area leading to better customer satisfaction and hopefully will lead to more consumers opting for PNG and gradually shifting away from LPG".

21. In this regard, the Ministry has submitted the following reply:

"22 Section 20(1) of the Act provides that for the access of a CGD network, such network should be declared as common carrier as per the regulations (known as auiding principle for declaration of a CGD network as common carrier) made by the PNGRB. Hence, even after the expiry of exclusivity, such CGD network cannot be accessed by the third parties till the time it is declared by PNGRB as common carrier network. PNGRB has notified guiding principle regulations on 30.09.2020. In order to facilitate smooth third-party access, PNGRB has also amended the CGD Access Code Regulation on 23.11.2020. Board initiated the process to declare 54 CGD networks as common carrier or contract carrier u/r 6(1) of PNGRB (Guiding Principles for Declaring City or Local Natural Gas Distribution Networks as Common Carrier or Contract Carrier) Regulation, 2020. Based on Board's approval, 54 public notices were issued on 13.09.2021 for initiating public consultation process for 30 days for declaration of such networks as common carrier or contract carrier. The comments were invited by 12.10.2021. PNGRB has received 245 comments from various stakeholders for all 54 networks. Thereafter Gujarat Gas Limited has challenged 13 public notices pertaining to their CGD networks before Hon'ble Gujarat High Court, wherein stay has been granted. Out of 54 CGD networks, 16 entities operating to 31 CGD networks have opposed the notice by their written submission to PNGRB and 6 entities operating 10 CGD networks have not submitted any response to PNGRB. Post public consultation in terms of regulation 6(4) of CGD Guiding Principles Regulations, 2020 comments were forwarded to six authorized entities on 07.01.2022 pertaining to their 10 Gas".

Ministry of Petroleum & Natural Gas O.M.No.L-15016/2/2021-GP-II, dated 14th July, 2022

Comments of the Committee

22. The Committee had observed that the entities are allowed marketing exclusivity period of 5/8/10 years from the date of authorization in terms of an exemption from the purview of the contract carrier or common carrier for the respective CGD Network. This deadline has already expired in many areas. The Committee had, therefore, recommended that there is a need for more players to participate in CGD networks which is a growing sector and hence when the exclusivity period is over, the entire process of inviting, allotting and operating of new players should be anticipated and acted well in advance. The Committee are satisfied to note that Board initiated the process to declare 54 CGD networks as common carrier or contract carrier u/r 6(1) of PNGRB. However, the Committee are dismayed to note that Gujarat Gas Limited has challenged 13 public notices pertaining to their CGD networks, 16 entities operating in 31 CGD networks have opposed the notice by their written submission to PNGRB. In this regard, the Committee would like the PNGRB/Ministry to respond to these notices of these entities and resolve their issues and declare these areas as common carriers at the earliest.

Recommendation No. 12

Rationalization of Restoration Charges on CGD Entities

23. The Committee had recommended as under:

"The Committee observe that in the absence of notified standardized charges very high restoration charges are levied on CGD entities for laying pipeline network by the authorities and moreover, the charges are not uniform across States. This leads to time and cost overruns on the projects and there is an urgent need to bring uniformity in the restoration charges.

The Committee have been informed that to bring commonality, uniformity and parity in the restoration charges the following models can be examined: (i) these charges may be streamlined by adopting Dig & restore by CGD entity whereby CGD entity restores road, entailing zero permission charges, and a mechanism may be developed wherein CGD entity provides a security deposit to ensure satisfactory restoration works; (ii) Another framework that can be evolved is wherein CGD entity gets a generals permission and designated authorities restore the roads, and pays permission charges (based on CPWD rates) towards restoration works; (iii) Otherwise, CGD entity pay annual charges at some fixed rate (say 2%-3%) of the prevailing retail selling price of domestic PNG to respective Municipal Corporation / Nagar Nigam for first 10 years. At the time of payment, such annual charges may be based on the total number of domestic PNG connections in that particular GA. In return, there should be no payment for all the road restoration charges i.e., at the time of laying pipelines.

The Committee, therefore, recommend that the issue of digging and restoration should be addressed urgently and MoPNG should take up the matter with Urban Development Ministry and with Municipal Authority/Local Bodies in state government to arrive at a standard mechanism across the country for restoration areas in the states and throughout the country.

The Committee desire that MoPNG/PNGRB should consider these suggestions in depth and consult other CGD entities on the restoration norms and arrive at a consensual mechanism after discussion with Urban / Municipal / Local bodies so as to streamline the issue".

24. In this regard, the Ministry has submitted the following reply:

"This Ministry has taken up the matter regarding uniformity in the restoration charges with various state governments. Further, during the national conclave on emerging opportunities in Natural Gas sector held on 23.01.2020, a draft CGD policy was released with a request to all the state governments to adopt the same for uniformity in regulatory and procedural aspect for expeditious expansion of CGD networks".

Ministry of Petroleum & Natural Gas O.M.No.L-15016/2/2021-GP-II, dated 14th July, 2022

Comments of the Committee

25. The Committee had recommended in their report that the issue of digging and restoration should be addressed urgently and MoPNG should take up the matter with Urban Development Ministry and with Municipal Authority/Local Bodies in state government to arrive at a standard mechanism across the country for restoration areas in the states and throughout the country. The Ministry in its action taken reply has stated that it has taken up the matter regarding uniformity in restoration charges with various state governments. Further, during the National Conclave on emerging opportunities in Natural Gas sector held on 23.01.2020, a draft CGD policy was released with a request to all the State Governments to adopt the same for uniformity in regulatory and procedural aspect for expeditious expansion of CGD networks. The Committee although noting the initiative taken to address the issue

are disappointed to observe that no data regarding the number of State Governments which have adopted this policy has been given and, therefore, the Committee would like the Ministry to share the data regarding States which are not adopted this policy. The action taken by the Ministry in this regard may be informed within three months to this Committee.

Recommendation No. 15

Increasing PNG Coverage

26. The Committee had recommended as under:

"The Committee note that use of natural gas as fuel has considerable advantage over traditional fuels as it is cleaner, more efficient, convenient and safe. The Government is promoting City Gas Distribution (CGD) projects in a phased manner which comprises providing piped natural gas (PNG) and Compressed Natural Gas (CNG) to domestic, commercial and industrial consumers.

The Committee note that 76.05 Lakh domestic connections have been provided to households so far and under 9th and 10th CGD Bidding Rounds, commitments have been made to provide 4.23 Crore PNG Domestic Connections. The Committee feel that PNG has many advantages over the LPG which is still the dominant fuel for domestic purposes. The natural gas which is transported / supplied in a piped network is a safe and economical way over the logistics involved in the distribution and supply of LPG cylinder to households. Also the customers are always apprehensive about lower volume/under weight of LPG domestic cylinders whereas, PNG consumption is metered. The Committee, therefore, recommend that the PSU oil marketing companies which have the dominant market share in the LPG cylinder business should aggressively enter the CGD network so as not to lose their customers as the country is set for a bigger and wiser CGD network coverage. One of the major goals could be saving on subsidies being given to domestic LPG cylinders. As the price of PNG is lower than the price of LPG, the consumers will also benefit from lower costs and is a win-win situation for both consumers and the Government".

27. In this regard, the Ministry has submitted the following reply:

"Providing PNG Connections is part of the development of CGD Network and the same is being carried out by the entities authorized by PNGRB. PNGRB has authorized 294 Geographical Areas (GAs) upto the 11-A CGD Bidding Round for development of CGD Networks. Out of this, 113 GAs have been authorized to various PSUs.

The cumulative target for various PSUs who have been authorized upto the 11-A CGD Bidding Round is 5.58 Crore PNG domestic connections to be achieved within the period of exclusivity from the purview of common carrier or contract carrier (0/3/5/8/10 years, as applicable).

It is to be noted that PNGRB had suspended the relative obligations towards MWP targets and granted extension of exclusivity from the purview of common carrier /

contract carrier for a period of 24 months w.e.f. 24th March, 2020 on account of restrictions imposed by the respective Government due to Covid-19 pandemic in India. As on 30.04.2022, the PSUs authorized under the 9th and 10th Round have established 1.79 Lakh PNG domestic connections as against the MWP target of 1.25 Crore PNG domestic connections in the 136 authorized GAs. Details have been placed at Annexure - B".

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Comments of the Committee

28. The Committee had recommended in their report that the PSU oil marketing companies which have the dominant market share in the LPG cylinder business should aggressively enter the CGD network so as not to lose their customers as the country is set for a bigger and wiser CGD network coverage. In its action taken reply the Ministry has stated that providing PNG Connections is part of the development of CGD Network and the same is being carried out by the entities authorized by PNGRB. PNGRB has authorized 294 Geographical Areas (GAs) upto the 11-A CGD Bidding Round for development of CGD Networks. Out of this, 113 GAs have been authorized to various PSUs. The cumulative target for various PSUs who have been authorized upto the 11-A CGD Bidding Round is 5.58 Crore PNG domestic connections to be achieved within the period of exclusivity from the purview of common carrier or contract carrier (0/3/5/8/10 years, as applicable).

However, the Committee note that in the reply, there is no mention about the steps taken by PSU Oil marketing companies to enter the CGD network business so as not to lose their customers and participate in the expanding CGD footprint in the country. Therefore, the Committee reiterate their recommendation that PSU oil market companies should actively participate in the bidding rounds of CGD network and also enter the areas where which has declared as company carrier to retain their customers effectively and also increase the PNG access and availability to the households in the country.

Recommendation No. 16

Gas can accelerate renewable energy shift

29. The Committee had recommended as under:

"The Committee observe that the future of energy lies in innovation and technological intervention in establishing a stable energy security framework. The

recent announcements by Hon'ble Prime Minister during the COP26 summit regarding net-zero emission targets by 2070, and reaching 500 GW of non-fossil fuel capacity and fulfilling 50 per cent of energy requirement from renewable energy by 2030 requires intensives and extensive development of robust energy infrastructure, will usher in a new investment climate within the country.

India has to be at the forefront in decarbonising the power sector towards net-zero emissions. India must take this transition in a smooth, reliable and affordable manner. Dissimilar technologies like coal and gas have in them the most complementing characteristics which can continue to support the grid in its operations while continuing to significantly decarbonise the sector and provide electricity at an affordable price. Gas power offers a value proposition and can turn out to be a key enabler to diversify into more renewable energy into the national grid and meet the increasing power demand in the country.

The Committee is of the opinion that Green hydrogen is attracting a lot of interest lately and there should be a strong push to bring down its cost of generation and make it affordable for a cleaner and greener future of energy. The Committee, therefore, recommend that the gas marketing PSUs like GAIL, Petronet LNG can explore the supply of gas to encourage the possibility of gas-based hybrid power plants to aid and accelerate India's renewable energy transition".

30. In this regard, the Ministry has submitted the following reply:

"Capacity of around 25 GW gas-based power plants exists in the country and almost 12 GW gas-based power plants are being stranded. Power pooling scheme was implemented by Ministry of Power in 2015-17 for running stranded Gas based power plant in the country. However, the scheme has not been re-implemented post 2017. GAIL remains continuously engaged with power generators in order to meet the requirements of power sector. With increasing addition of renewable sources of power, gas based power plants provide the best option for grid balancing due to faster ramping rates, low technical minimum level of operation and high part load efficiency. GAIL supplied around 14.76 MMSCMD of gas to power sector during FY 2021-22.

Around 500 GW of RE energy is proposed to be installed in the country in coming years. RE is highly dependent on weather and has inherent challenges like seasonality, reliability, diurnal variations etc. resulting in the need of grid balancing. Findings of study done by CEA, CERC, MoP and POSOCO highlight importance/benefits of gas based power in integration of RE capacity in the country. It is conclusive from their study that Gas based power is more suited to provide intermittency support than coal based. RE may be bundled with Gas power catering to intermittency. Furthermore, natural gas-based power plants are much cleaner in respect of PM, SOx, Nox & CO2 emission compared to a coal-based power plants and RE-Gas Power bundle is likely to be cleaner than RE-Coal power bundle and would reduce the adverse impact of pollution in the environment and health.

Suitable Peaking power policy for using RE-Gas bundled model is required for nudging utilities to purchase RE-Gas power to serve customers 24x7. For example, Cost of externalities of coal-based power plant may be considered in merit order dispatch and Gas based power purchase obligation can also support reviving gas power plants. Further, there may be a possibility to operationalize gas-based power

plants using domestic MDP gas from diverse areas, including gas from CBM fields, which is accessible at a competitive price or by envisaging any scheme similar to Power pooling".

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Comments of the Committee

31. The Committee had opined in their report that Green hydrogen is attracting a lot of interest lately and there should be a strong push to bring down its cost of generation and make it affordable for a cleaner and greener future of energy and recommended that the gas marketing PSUs like GAIL, Petronet LNG can explore the supply of gas to encourage the possibility of gas-based hybrid power plants to aid and accelerate India's renewable energy transition.

The Committee while going through the action taken reply of the Ministry find that there is no mention of efforts to generate green hydrogen as an energy source for the country. The Committee would like the Ministry to explore the possibility of green hydrogen in its energy mix and encourage oil PSUs to actively invest in such green hydrogen projects so that it can accelerate the Government's efforts to promote clean and renewable energy.

CHAPTER II

RECOMMENDATIONS/OBSERVATIONS WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT

Recommendation No. 1

National Gas Grid Network

The Committee note that India is the world's third largest energy consuming nation and a large part of hydrocarbon requirement of about 87 percent is met through imports of crude oil. India's share in global energy consumption is set to rise and high reliance will be on import. The Committee also note that natural gas being an environment friendly clean fuel has a potential to play a significant role in providing solutions to the growing energy needs and to address environmental challenges.

The Committee further note that the Government is now focused to promote usage of natural gas across the country so as to increase the share of natural gas in the primary energy mix from the current level of 6 percent to at least 15 percent in the coming years and move towards a gas based economy. Towards this end the gas pipeline infrastructure in the country is being developed along with development of gas sources in the form of domestic production and import of Liquefied Natural Gas into the country. The Committee are also aware that gas pipeline is an economical and safe mode of transporting the natural gas.

The National Gas Grid has been envisaged to ensure the availability and equitable distribution of natural gas in all parts of the country. At present, about 20,227 kms of natural gas pipeline network is in operation and in order to develop an vibrant gas market, an additional 15,500 kms of pipeline is being executed across the country to complete the gas grid which will connect all major demand and supply centres in the country.

The Committee also note that Government has plans to create infrastructure like LNG terminals for import of LNG into the country to meet the rising natural gas demands. The Committee also observe that the Ministry/PNGRB has invited bids for of City Gas distribution network in many Geographical areas in the country in the recent 8th, 9th and 10th rounds. After completion of these rounds of bidding, it is noted that 238 Geographical Areas (GAs) in 407 districts have access to CGD network.

The Committee are of the opinion that a national gas grid is an important energy infrastructure project in the country which will help the country achieve social and economic progress along with development of associated projects namely execution of pipelines projects, CGD networks and LNG terminals, etc. The Committee appreciate the move of the Government to create an infrastructure with a planned gas pipeline of 35,700 kms of across the country, out of which 20,227 kms are operational and 15,500 kms are under various stages of construction and expected to be completed by 2024-25. Considering the efforts and importance, the Committee recommend that the Ministry should periodically review the progress of the national gas grid projects and take appropriate steps and coordinate with the concerned authorities at the highest level so that this important infrastructure project is not delayed and completed well in time and without cost overruns.

REPLY OF THE GOVERNMENT

PNGRB has authorized approximately 34,135 Km length of Natural Gas Pipeline Network across the country, as on 31.03.2022. Out of this, 21,715 Km length of natural gas pipelines including spur lines, tie-in connectivity, Sub Transmission Pipelines (STPL) and dedicated pipelines, are operational and a total of 14,240 Km length of pipelines is under various stages of construction.

After grant of authorization, PNGRB continuously monitors the pipelines projects for timely completion of the pipelines authorized by the Board. Further, PNGRB Act, 2006 and Regulations made there under also provides for imposition of penalty for non-achievement of the assigned targets.

The position of Member (Legal) in the Board was vacant from 20.03.2020 to 14.03.2022. Although, the regular meetings were being conducted to review the progress of the pipeline project. Since, the joining of Member (Legal) in the Board, regular hearings under Regulation 16 of the NGPL Authorization Regulations are in progress. Remedial time has been given by the Board to the entities and they have been directed to complete the natural gas pipeline projects within the stipulated time. Any failure henceforth will result in action under the provisions of PNGRB Act and regulations framed there under.

PNGRB has authorized 294 Geographical Areas (GAs) upto the 11-A CGD Bidding Round. Lol for the last GA under 11-A CGD Bidding Round has also been issued. Upon completion of 11A CGD Bidding Round, the entire country except part of North-East, part of J&K, Ladakh, Lakshadweep and Andaman and Nicobar, shall be covered for the development of CGD network.

In addition to PNGRB, review of progress of pipeline and CGD infrastructure is also being done by the Ministry at various levels on a regular basis. In case any assistance/support is required by the entities w.r.t. permissions, clearances etc at state level or central level, the Ministry takes up with the concerned authority for early resolution.

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Recommendation No. 2

Single-Window Fast Track System for approvals/clearances

The Committee note that the laying of pipelines have been delayed due to multiplicity of agencies involved in granting clearances and permissions. The Committee also observe that there have been delays in RoU notification, rate determination, demand of higher compensation rates and due to non-availability of land ownership records with many State Governments.

National Gas Grid project is of national importance and therefore, there is a need to bring uniformity in permissions and clearances from various central / state / local bodies / departments to lay pipeline network. The Committee exhort the Ministry/PNGRB to consider issuing a blanket approval for pipeline laying, with a half-yearly/yearly reconciliation mechanism and a forum for joint consultative mechanism involving elected representatives from local and at state/district level should be evolved to iron out all the differences arising among various agencies and in this regard, there can be a Infrastructure Approvals Committee at State/District level which can take up such clearances and fast track them. The Committee, therefore, recommend that the Ministry/PNGRB should bring out a mechanism for a single-window fast track system which will help in reducing the time to process such permissions.

REPLY OF THE GOVERNMENT

The matter regarding various statutory approvals for laying Natural Gas Pipelines is under the purview of the State Governments or other Central Ministries. This Ministry has taken up with State Governments and other Central Ministries for considering creation of a single window system for providing various permissions for development of CGD and Pipeline infrastructure.

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Comments of the Committee (Please see Para No. 7 of Chapter-I)

Recommendation No. 4

Demand and Supply of Natural Gas

The Committee note that Natural Gas has emerged as one of the important source of energy in the world. Due to its inherent advantages over other fossil fuels, there is a global trend to shift in energy mix towards to natural gas. However, in case of India, share of natural gas in total energy mix currently accounts only 6 percent as against global share of 24.2 percent. As the Government has been adopting policies to boost economic growth and the demand for natural gas is only going to increase by 2030. The Committee observe that this rise in demand will widen the gap between demand and supply of gas in the country. Unless domestic production is increased from or due to new discoveries the demand has to be met through LNG imports. However, these imports are also subject to price fluctuations in the international market.

The Committee are of the view that MoPNG should evolve a plan to explore all possible options to increase the domestic production and supply of natural gas in the country. Towards this end, the Committee desire that the Ministry should increase the blocks awarded for exploration, intensify activities for exploration and production from already discovered fields and pursue strong diplomatic efforts to expedite construction of transnational pipelines from neighbouring regions to bring gas and try to enter into longer term contract with countries for import of natural gas/LNG at economic cost. The Committee further desire that unconventional sources of gas like Gas Hydrates, CBM, Shale Gas etc. should be seriously pursued for exploration and development. CBG plants may also be looked at as an important option to fulfill the demand. Therefore, the Committee recommend that Ministry should prepare a blue print and way forward for enhancing the supply and domestic production of natural gas through exploitation of unconventional hydrocarbons, expediting production activities in awarded blocks along with fiscal and monetary incentives like tax breaks, stable tax regime etc.

REPLY OF THE GOVERNMENT

India's production for 2021-22 is 29.69 MMT of Oil and 34.02 BCM of Gas. Four strategic priorities have been identified for increasing domestic oil and gas production:

- Enhancement of production from already producing field,
- Speedy execution of FDPs in existing and new fields,
- Monetization of unmonetized fields and discoveries, and
- Augmenting inventory of flowing wells.

Government has undertaken several transformational policy reforms to invigorate the E&P ecosystem and establish a conducive business environment, such as shifting from production sharing contract to revenue sharing contract under Hydrocarbon Exploration and Licensing Policy (HELP) through Open Acreage Licensing Programme (OALP), bidding of discovered fields under Discovered Small Field (DSF) bid rounds, implementation of production enhancement technology through Enhanced Recovery policy, etc. The new policy framework has progressive features such as single license for all forms of hydrocarbons, low regulatory burden through revenue-sharing model, marketing and pricing freedom for oil and gas produced and reduced royalty levels. An early monetization scheme has been put in place to facilitate and encourage commercial production from a new discovery while exploration of the block is still underway.

By 2025, total 5 lakh sq. km. of sedimentary basinal area is sought to be put under E&P activities through award of Exploration blocks under OALP Bidding and by 2030, this sedimentary basinal area under E&P activities is sought to be doubled to 1 million sq km. With comprehensive E&P efforts, new discoveries can be made to sustain and enhance future production.

The seismic survey activities under National Seismic Program commenced in September 2016 and completed in December 2021 by achieving ~97% of the total target. The logistically difficult areas where seismic survey couldn't be carried out, are being taken up through Airborne survey. The generated data will be instrumental in identifying the prospective areas, carving out the blocks in Open Acreage Licensing Policy (OALP) etc.

In a bid to attract further investments in the E&P sector, the government is making efforts to improve the proceptivity perception of Indian Sedimentary basins. Recognizing the significance of geoscientific data towards gaining a better perception of Indian sedimentary basins, Government has ushered data-driven reforms in the sector like the establishment of state-of-the-art National Data Repository (NDR), the launch of National Seismic program (NSP) and the Hydrocarbon Resource Reassessment Survey 2022.

Also, Government is in the process of launching Mission Anveshan for acquisition and assimilation of Geo-scientific data for comprehensive appraisal of the Indian sedimentary basins. The programme will comprise of Acquisition, Processing and Interpretation (API) of geo-scientific data and up-gradation of NDR to cloud-based architecture allowing easy access to data visualization and analysis.

The appraisal program under NSP was planned to cover onland basins. However, in next campaign, offshore basins (East Coast, West Coast and Andaman) upto EEZ boundaries are being taken up. Till February 2022, total 22,555 LKM 2D Broadband seismic data in Andaman offshore has been acquired. The availability of quality data will enable the investors towards making a more informed decision w.r.t. carving of blocks for E&P exploration in India.

Government has launched many investment opportunities, recently, in the form of OALP Rounds, DSF III Round and Special CBM Bid Round to boost E&P activities. The encouraging response has been received from E&P Operators.

A special CBM bid round (SCBM-2021) has been launched in September 2021 by Gol with the offer of 15 CBM blocks under the Hydrocarbon Exploration Licensing Policy through International Competitive Bidding, with roughly 8,500 Sq. Km on offer distributed across 6 states. The Blocks are carved out in consultation with Ministry of Coal resolving the coal block overlap. The prognosticated resource of these blocks is estimated at around 700 BCM.

Under the Shale Gas Policy - 2013, 50 blocks in 4 basins; Assam, Krishna Godavari, Cauvery & Cambay were identified by ONGC and 6 blocks in 2 basins; Jaisalmer and Assam were identified by OIL in the Phase-I of exploration which ended in April-2017. Till FY 2021-22, ONGC had drilled a total of 30 wells in 4 basins and OIL has drilled 4 shale wells in 2 basins.

Gas hydrate exploration in India is steered by the Ministry of Petroleum & Natural Gas under National Gas Hydrate Program (NGHP). Two expeditions, the first in 2006 (NGHP-01) and the second in 2015 (NGHP-02) were undertaken. Under NGHP-01, 39 holes were drilled to explore the presence of gas hydrate at 21 sites in Krishna-Godavari (KG), Mahanadi, Andaman, and Kerala-Konkan Basin. Except Kerala-Konkan, the presence of gas hydrate was established in all three basins, but such gas was proved to be nonexploitable with existing technologies. Under NGHP-02, 42 holes were drilled at 25 sites in KG and Mahanadi Basin. Sand reservoirs with gas hydrate were located at two places in KG Basin and the considered to be prospective for future production testing. International and national experts engaged through MoU under NGHP advised that future production testing should be undertaken in three phases. Phase 1 was proposed to deal with integration and interpretation of data acquired under NGHP-01 & 02 campaigns. Phase-2 would involve acquisition of additional data to better-understand the subsurface integrity required for successful production testing. Phase-3 was proposed to conduct production testing at selected sites. Currently, Phase-1 activities are underway at various places in India, Japan and USA.

> Ministry of Petroleum & Natural Gas O.M.No.L-15016/2/2021-GP-II, dated 14th July, 2022 **Comments of the Committee** (Please see Para No. 13 of Chapter-I)

Recommendation No. 5

Capacity Utilization of Gas Pipelines

The Committee observe that the capacity utilization of existing natural gas pipelines are currently on the lower side. Some of them are operating in the level of 10 percent to 20 percent level of utilization. It is also seen that the pipelines which have been in operation for more than 10 years have not been running to their optimum levels and are constrained mainly by limited availability of domestic gas. Some Gas Based Powder plants connected to gas pipelines have become stranded (approx. with installed capacity 14,305 MW) due to non-availability of domestic gas supply and imported gas is very expensive.

The Committee understand that natural gas pipelines entail long gestation periods for optimum demand realization. However, there is a strong need to address the challenges

impacting the full utilization of these gas pipelines for various sectors namely industrial, power and fertilizer usage. The Committee note that the investments of this magnitude requires a full and efficient capacity utilization of such important infrastructure in the absence of which such projects drain away the precious resources invested for the project. It is, therefore, recommended that immediate steps be taken to expedite enhancement of domestic production specially through exploitation of unconventional sources and to interconnect various gas pipelines, synchronized commissioning / conversion of upcoming gas-based Fertilizer units, Refinery Units, Steel Industry etc., along the pipeline routes by making gas available to these sectors.

REPLY OF THE GOVERNMENT

In addition to steps taken for augmenting natural gas production in India by this Ministry, PNGRB has authorized natural gas pipelines to various entities with an aim to provide access of natural gas to all part of the country.

In order to increase natural gas pipeline capacity utilization following steps have been initiated by:

- 1. Connectivity of new gas sources including CBM supplies, domestic gas finds and LNG terminals to the natural gas pipelines to enable early monetization and improved utilization of NG pipelines.
- 2. Interconnections of various pipelines to increase pipeline utilization.

3. Long term as well as short term LNG have been sourced from international market. Subject to conclusion of commercial terms with downstream customers, the pipeline utilization shall further improve.

4. Government is considering formation of a TSO for providing access of pipeline capacity to various entities in a transparent manner.

5. PNGRB has authorized recently authorized 67 GAs under the 11 and 11A CGD bidding round. With the completion of this round, 98% of country's population and 88% of country's geography would have access to natural gas which would further increase pipeline utilization of various natural gas pipelines.

6. Natural Gas pipeline entities also provides last mile connectivity to various industrial consumers so as to enable them consume natural gas and shift from other alternative fuels.

7. Indian Gas Exchange has become functional and it provides for opportunity to source gas at a competitive rate which shall result in development of natural gas market and increased pipeline utilization.

8. Various existing fertilizer plants and refinery in the eastern and north eastern part of the country are expected to be connected to national gas grid. Gas supply agreement for these units are already in place/expected to be finalized shortly.

9. Government is also exploring possibility of import of gas from neighboring countries like Bangladesh and Myanmar to increase pipeline capacity utilization and improved gas availability.

10 Proposal of unified tariff for various interconnected pipelines is under consideration by PNGRB.

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Recommendation No. 6

Functioning of PNGRB

The Committee note that PNGRB was established after the Petroleum and Natural Gas Regulatory Board Act, 2006 was passed by the Parliament and got the assent of the President on 31st March, 2006. The Board consists of a Chairperson, a Member (Legal) and three other Members who are appointed by the Central Government. The Chairperson and other Members hold office for a term of five years or until they attain the age of sixty-five years, whichever is earlier. Three Members of the Board, including Chairperson presiding over the meeting, shall constitute the quorum for transaction of business at a meeting of the Board:

The Committee note that the PNGRB board has not been fully constituted for the last few years. There are several vacancies in the board and even the post of Financial Advisor has been vacant and many a time even the number required for quorum is not available. The Committee are surprised to note that in the absence of any quorum or full strength of the Board, an important organization like PNGRB will be unable to take decisions resulting in policy paralysis and delay in decision making would render the agency into meaningless and toothless organization. Such vacancies over long periods of time hamper the day-to-day use of functioning also and particularly when the Government has plans to increase use of natural gas in the country and is currently undertaking such massive expansion of CGD network in the country.

The Committee further note that these vacancies will preclude PNGRB in the way of gaining stability and establishing itself as an efficient regulator and fails to understand why PNGRB has not been manned by persons with appropriate professional background and experience. The Committee view with seriousness at the long period of vacancies and recommend that the Government urgently needs to address the vacancy positions in the PNGRB and a mechanism to select candidates well in advance before the vacancies arise and also strengthen the organization in terms of human resources at all levels to fully handle and manage the rapid growth of the natural gas pipeline sector. The action taken for filling up the vacancies may be intimated to this Committee.

REPLY OF THE GOVERNMENT

The PNGRB Board comprises of 1 Chairperson and 4 members. Presently 3 Members including Member (Legal) have been appointed and the post of Chairperson and one Member is vacant.

The Interview for the post of the vacant Member post has already been concluded and recommendations have been forwarded to ACC for approval. Further, process of appointment of Chairperson of PNGRB has already started. In this regard advertisement for the post of Chairperson has already been published. Based on the applications received, the candidates would be shortlisted & interview would be conducted and recommendation would be forwarded to ACC for approval.

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Recommendation No. 8

Dispute Resolution Mechanism

The Committee observe that PNGRB is facing litigation against it in some cases and are before Appellate Tribunal for Electricity (APTEL), High Courts and some of the arbitration cases are pending in Supreme Court. With many legal an issue, the progress of pipelines and CGD networks gets affected and completion of various projects is delayed which hampers and delay growth of gas sector in the country. The Committee have been informed that legal advice is obtained by PNGRB from Attorney General, Solicitor General and other Senior Advocates and also from a panel of advocates who represent it in various judicial bodies.

The Committee have been informed by PNGRB that as of now there is no scope for Alternate Dispute Resolution mechanism. The Committee desire that PNGRB/Ministry consult various stakeholders to identify the common problems and prepare a standard operating procedure for resolution mechanism. The Committee stress that avenues must be explored to bring alternate dispute resolution mechanism by wider consultation for brining transparency and efficiency in handling legal issues. A speedy resolution to legal issues would pave the way for an efficient and continuous progress of sector which would improve the confidence of stakeholders. The Committee recommend that steps be taken to reduce the number of cases by engaging with the parties and arrive at an amicable solution rather than taking recourse to courts in every matter.

The Committee while emphasizing the need for reduction of litigation, recommend the Ministry to review the status of pending litigations related to CGD and pipeline networks. Accordingly, the Ministry should create a robust and transparent institutional mechanism through engaging with parties before proceeding to various legal recourse to settle disputes so that valuable time and resources can be saved.

REPLY OF THE GOVERNMENT

PNGRB is empowered by the PNGRB Act, 2006 to adjudicate the complaint in accordance with Section 25 and to settle/adjudicate the disputes in accordance with Section 24 of the Act. At present, there is no institutionalized mechanism regarding the Alternative Dispute Resolution Mechanism for the cases filed/pending before the PNGRB. However, recently, PNGRB has initiated steps to discuss the matters with the stakeholders to reduce the number of litigations. To illustrate 10 (Ten) Review Petitions were filed under Section 13 (1)(h) of the Act, challenging the relief granted on account of Force Majeure. By discussion with stakeholders, 5 (Five) Review Petitions were withdrawn.

Moreover, as per the recommendation of the Committee, PNGRB would explore all the possibilities of reduction of litigation before PNGRB or against PNGRB before the Hon'ble Courts/APTEL.

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Recommendation No. 9

Public Liability Insurance Policy

The Committee observe that in compliance of Regulation 9(1) of PNGRB (ERDMP) Regulations 2010, it is mandatory to comply with the Public Liability Insurance Act 1991 and accordingly CGD entities are required to have "Public Liability Insurance Policy" for consumers. The Committee also note that the customer base has increased to 76 lakhs and is targeted to 4.23 crores households and currently 2830 CNG station and plans to set up 8181 CNG stations under 9th and 10th CGD bidding rounds. With such a huge network coming up, safety issues need to be addressed seriously. Therefore, it is imperative that the awareness among PNG/CNG consumers need to be increased about the details of this policy along with the safe practices.

Also, consumers should be informed that in case of any untoward incident which causes injury/property damage or death of life where PNG/CNG is the primary cause of fire, they may file a claim from the insurance company. The Committee also desire that Ministry may review the process of claim settlement and make public liability insurance policy simple to be understood by common people. Such advisories may be printed in the bills issued to consumers /customers so as to increase the awareness among them along with a toll free number to seek clarifications in this regard. The Committee, therefore, recommend that awareness campaigns should be carried out among consumers so as to avert any untoward incident.

REPLY OF THE GOVERNMENT

CGD entities are liable to comply with the PNGRB (ERDMP) Regulations 2010 and are required to have "Public Liability Insurance Policy" in place.

The CGD entities undertake various activities for raising awareness among consumers towards safety precautions related to PNG and CNG. The activities include onsite campaigns, social media campaigns, Radio campaigns, safety briefing sessions, trainings, mock drills etc. The awareness programs contain Dos & Don'ts, incident reporting procedure, action during emergency etc.

24 x 7 emergency response vehicles, trained manpower with all necessary equipment, and GPS are in place for emergency cases. 24x7 helpline number is also in place to receive emergency complaints.

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Recommendation No. 11

Competition in Geographical Areas

The Committee observe that the entities are allowed marketing exclusivity period of certain years from the date of authorization in terms of an exemption from the purview of the contract carrier or common carrier for the respective CGD Network. This deadline has already expired in many areas. The Committee feel that there is an urgent need to review and update for City or Local Natural Gas Distribution Networks be declared as common carrier or contract carrier to provide non-discriminatory open access to third party entities.

It should be opened to increase the competition in providing the Piped Natural Gas (PNG) so as to benefit to the maximum number of people. Also, the people should be given the choice to shift to any operator after the exclusivity period. With the increase in competition, a person will have the choice of availing the connection as and when one wishes and therefore should not be dependent on the CGD entity. The Committee recommend that there is a need for more players to participate in this nascent and growing sector and hence when the exclusivity period is over, the entire process of inviting, allotting and operating of new players should be anticipated and acted well in advance. The Committee further, hope that this will enhance the quality of service and delivery in a particular geographical area leading to better customer satisfaction and hopefully will lead to more consumers opting for PNG and gradually shifting away from LPG.

REPLY OF THE GOVERNMENT

22 Section 20(1) of the Act provides that for the access of a CGD network, such network should be declared as common carrier as per the regulations (known as guiding principle for declaration of a CGD network as common carrier) made by the PNGRB. Hence, even after the expiry of exclusivity, such CGD network cannot be accessed by the third parties till the time it is declared by PNGRB as common carrier network. PNGRB has notified guiding principle regulations on 30.09.2020. In order to facilitate smooth third-party access, PNGRB has also amended the CGD Access Code Regulation on 23.11.2020. Board initiated the process to declare 54 CGD networks as common carrier or contract carrier u/r 6(1) of PNGRB (Guiding Principles for Declaring City or Local Natural Gas Distribution Networks as Common Carrier or Contract Carrier) Regulation, 2020. Based on Board's approval, 54 public notices were issued on 13.09.2021 for initiating public consultation process for 30 days for declaration of such networks as common carrier or contract carrier. The comments were invited by 12.10.2021. PNGRB has received 245 comments from various stakeholders for all 54 networks. Thereafter Gujarat Gas Limited has challenged 13 public notices pertaining to their CGD networks before Hon'ble Gujarat High Court, wherein stay has been granted. Out of 54 CGD networks, 16 entities operating to 31 CGD networks have opposed the notice by their written submission to PNGRB and 6 entities operating 10 CGD networks have not submitted any response to PNGRB. Post public consultation in terms of regulation 6(4) of CGD Guiding Principles Regulations, 2020 comments were forwarded to six authorized entities on 07.01.2022 pertaining to their 10 GAs.

Ministry of Petroleum & Natural Gas O.M.No.L-15016/2/2021-GP-II, dated 14th July, 2022 **Comments of the Committee** (Please see Para No. 22 of Chapter-I)

Recommendation No. 12

Rationalization of Restoration Charges on CGD Entities

The Committee observe that in the absence of notified standardized charges very high restoration charges are levied on CGD entities for laying pipeline network by the authorities and moreover, the charges are not uniform across States. This leads to time

and cost overruns on the projects and there is an urgent need to bring uniformity in the restoration charges.

The Committee have been informed that to bring commonality, uniformity and parity in the restoration charges the following models can be examined: (i) these charges may be streamlined by adopting Dig & restore by CGD entity whereby CGD entity restores road, entailing zero permission charges, and a mechanism may be developed wherein CGD entity provides a security deposit to ensure satisfactory restoration works; (ii) Another framework that can be evolved is wherein CGD entity gets a generals permission and designated authorities restore the roads, and pays permission charges (based on CPWD rates) towards restoration works; (iii) Otherwise, CGD entity pay annual charges at some fixed rate (say 2%-3%) of the prevailing retail selling price of domestic PNG to respective Municipal Corporation / Nagar Nigam for first 10 years. At the time of payment, such annual charges may be based on the total number of domestic PNG connections in that particular GA. In return, there should be no payment for all the road restoration charges i.e., at the time of laying pipelines.

The Committee, therefore, recommend that the issue of digging and restoration should be addressed urgently and MoPNG should take up the matter with Urban Development Ministry and with Municipal Authority/Local Bodies in state government to arrive at a standard mechanism across the country for restoration areas in the states and throughout the country.

The Committee desire that MoPNG/PNGRB should consider these suggestions in depth and consult other CGD entities on the restoration norms and arrive at a consensual mechanism after discussion with Urban / Municipal / Local bodies so as to streamline the issue.

REPLY OF THE GOVERNMENT

This Ministry has taken up the matter regarding uniformity in the restoration charges with various state governments. Further, during the national conclave on emerging opportunities in Natural Gas sector held on 23.01.2020, a draft CGD policy was released with a request to all the state governments to adopt the same for uniformity in regulatory and procedural aspect for expeditious expansion of CGD networks.

Ministry of Petroleum & Natural Gas O.M.No.L-15016/2/2021-GP-II, dated 14th July, 2022 **Comments of the Committee** (Please see Para No. 25 of Chapter-I)

Recommendation No. 13

CNG Network

The Committee note that good progress have been made in making 2,830 CNG Stations operational across the country. Delhi and Mumbai have adequate number of CNG Stations mainly due to the IGL and MGL operating in these areas. The Committee are happy to note that the existing retail outlets of OMCs which dispense auto fuels have been modified to provide CNG also. However, most of the other cities where CGD is operational do not have high penetration of CNG stations. The Committee feel, with sparse network of CNG

Stations, the people in these cities have not been able to get the full benefit of CNG for their requirement.

The Committee have noted that under 9th and 10th bidding rounds, a total of 8181 CNG Stations are planned to be set up. The Committee have been informed that the bids for 11th round have also been invited. The Committee recommend that all the stations planned in these rounds be made fully operational in a way that leads to widespread and equitable and balanced network across the geographical areas rather than concentrate in a few select metro areas.

REPLY OF THE GOVERNMENT

Establishment of CNG Stations is part of the development of CGD Network and the same is being carried out by the entities authorized by PNGRB. PNGRB has authorized 294 Geographical Areas (GAs) upto the 11-A CGD Bidding Round for development of CGD Networks.

In the 294 GAs authorized so far by PNGRB, the entities have to establish 17,700 CNG stations as per the targets assigned to them within the period of exclusivity from the purview of common carrier or contract carrier (0/3/5/8/10 years, as applicable).

It is to be noted that PNGRB had suspended the relative obligations towards MWP targets and granted extension of exclusivity from the purview of common carrier/contract carrier for a period of 24 months w.e.f 24th March, 2020 on account of restrictions imposed by the respective Government due to Covid-19 pandemic in India.

As on 30.04.2022, the CGD entities authorized under the 9th and 10th Round have established 1,556 CNG stations as against MWP target of 8,181 CNG stations in the 136 authorized GAs. The GA wise details in this regard are enclosed at Annexure A.

Ministry of Petroleum & Natural Gas O.M.No.L-15016/2/2021-GP-II, dated 14th July, 2022

Recommendation No. 14

CNG Stations on highways

The Committee note that there is an inadequate number of CNG stations along the national highways causing hardships to commuters particularly the commercial vehicles using CNG fuel on these routes. This situation needs to be remedied by giving the licenses are awarded to entities to operate CNG stations in the highways. The Committee, observe that the new CNG stations should be based on the potential of emerging smart cities. As many new highways and expressways are being built by Union government and State governments, MoPNG must discuss with MoRTH/NHAI for provisioning of compressed natural gas stations and accordingly, entities who have won bids in these geographical areas should be mandated to provide the same concomitant with the commissioning of highways. This will go a long way in providing comfort to vehicle users to switch to CNG vehicles. The Committee, therefore, recommend that a much more nuanced, proactive and scientific approach needs to be adopted so that CNG is made available at convenient locations on these both existing and under construction highways to cater to the needs of users.

REPLY OF THE GOVERNMENT

The entities establish CNG stations at various locations in their authorized GA based on the techno-commercial viability in the respective locations. Though PNGRB monitors the progress of authorized GAs in comparison to their assigned MWP targets on a monthly basis. However, it may be noted that PNGRB has no role whatsoever with respect to the location of establishment of CNG Stations. Further, CGD entities build network of CNG stations, which are spread across its authorized GAs, starting with commissioning the CNG stations at the major demand centers and Highways across the district. CGD entities have setup CNG station on highways and efforts are on to create more such CNG facilities along national highways in its authorized GAs. Various models of CNG stations such as COCO, DODO, OMC ROs are in operation to facilitate the availability of CNG along highways.

> Ministry of Petroleum & Natural Gas O.M.No.L-15016/2/2021-GP-II, dated 14th July, 2022

Recommendation No. 15

Increasing PNG Coverage

The Committee note that use of natural gas as fuel has considerable advantage over traditional fuels as it is cleaner, more efficient, convenient and safe. The Government is promoting City Gas Distribution (CGD) projects in a phased manner which comprises providing piped natural gas (PNG) and Compressed Natural Gas (CNG) to domestic, commercial and industrial consumers.

The Committee note that 76.05 Lakh domestic connections have been provided to households so far and under 9th and 10th CGD Bidding Rounds, commitments have been made to provide 4.23 Crore PNG Domestic Connections. The Committee feel that PNG has many advantages over the LPG which is still the dominant fuel for domestic purposes. The natural gas which is transported / supplied in a piped network is a safe and economical way over the logistics involved in the distribution and supply of LPG cylinder to households. Also the customers are always apprehensive about lower volume/under weight of LPG domestic cylinders whereas, PNG consumption is metered. The Committee, therefore, recommend that the PSU oil marketing companies which have the dominant market share in the LPG cylinder business should aggressively enter the CGD network so as not to lose their customers as the country is set for a bigger and wiser CGD network coverage. One of the major goals could be saving on subsidies being given to domestic LPG cylinders. As the price of PNG is lower than the price of LPG, the consumers will also benefit from lower costs and is a win-win situation for both consumers and the Government.

REPLY OF THE GOVERNMENT

Providing PNG Connections is part of the development of CGD Network and the same is being carried out by the entities authorized by PNGRB. PNGRB has authorized 294 Geographical Areas (GAs) upto the 11-A CGD Bidding Round for development of CGD Networks. Out of this, 113 GAs have been authorized to various PSUs.

The cumulative target for various PSUs who have been authorized upto the 11-A CGD Bidding Round is 5.58 Crore PNG domestic connections to be achieved within the period of exclusivity from the purview of common carrier or contract carrier (0/3/5/8/10 years, as applicable).

It is to be noted that PNGRB had suspended the relative obligations towards MWP targets and granted extension of exclusivity from the purview of common carrier/contract carrier for a period of 24 months w.e.f. 24th March, 2020 on account of restrictions imposed by the respective Government due to Covid-19 pandemic in India. As on 30.04.2022, the PSUs authorized under the 9th and 10th Round have established 1.79 Lakh PNG domestic connections as against the MWP target of 1.25 Crore PNG domestic connections in the 136 authorized GAs. Details have been placed at Annexure B.

> Ministry of Petroleum & Natural Gas O.M.No.L-15016/2/2021-GP-II, dated 14th July, 2022 Comments of the Committee (Please see Para No. 28 of Chapter-I)

CHAPTER III

RECOMMENDATIONS/OBSERVATIONS WHICH THE GOVERNMENT DO NOT DESIRE TO PURSUE IN VIEW OF THE GOVERNMENT'S REPLIES

- Nil -

CHAPTER IV

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

Recommendation No. 3

Gas Grid Infrastructure

The Committee note that pipelines are being laid across the country under National Gas Grid project to transport gas and spur lines from these trunk pipelines are being drawn to take gas to end-user. The country is having a total length of about 20,227 kms operational pipelines and about 15,500 kms of additional pipeline are to be added by 2024-25. The Committee further note that spur lines from these trunk pipelines are being drawn to take gas to the end users.

The Committee although impressed with the expansion of pipeline infrastructure are concerned to note that the work on Haldia-Jagdishpur Pipeline, Kochi-koottanad-Bengaluru-Mangaluru Pipeline (KKMPL) and Angul-Srikakulam Pipeline has been delayed for various reasons like demands for higher compensation by farmers, issues of right of use (RoU), forest clearance, etc. These projects are of national importance in building a stable energy security architecture for the country. There have been some instances where the State Governments in the above pipeline projects have been less than enthusiastic towards completing these projects.

The Committee are of the strong view that National Gas Grid is central to development of gas distribution networks in the country and it is essential that the completion schedule of these trunk pipelines should be strictly adhered to. The Committee expresses their unhappiness on the delay on the laying of Important trunk pipelines in few stretches which adversely affects the connected portion of the national gas grid. The Committee, therefore, recommend that the Ministry of MoPNG should evolve and devise better coordination mechanism for the active involvement of the State Governments to complete the laying of pipeline infrastructure in a time bound manner and also to ensure accountability of different stakeholders.

REPLY OF THE GOVERNMENT

The review of progress of pipeline is being done by the Ministry at various levels on a regular basis. In case any assistance/support is required by the entities w.r.t permissions, clearances etc at state level or central level, the Ministry takes up with the concerned authority for early resolution.

Ministry of Petroleum & Natural Gas O.M.No.L-15016/2/2021-GP-II, dated 14th July, 2022 **Comments of the Committee** (Please see Para No. 10 of Chapter-I)

Recommendation No. 10

Need to re-define Coverage in Geographical Areas

The Committee are happy to note that the numbers of geographical areas (GAs) have been increasing consistently and 238 GAs are covering 400 districts across the country

with a commitment to reach 520 districts, which would cover approximately 70 percent of the country's Geographical area and 84 percent of its population in 11th CGD bidding round.

The Committee note the ambitious targets with concern over the actual number of beneficiaries of these projects. The Committee further note that even when an area has been marked as covered in a particular geographical area, the connections do not reach every household. The definition of declaring a GA does not necessarily mean the coverage to the people in the majority households in that region.

The Committee note that CGD Networks are established based upon the availability of natural gas in their vicinity and Geographical Areas may consist of single district, part district, two or more districts or any such combination without taking into account the actual number of connections.

For instance of Delhi where CGD, network is being handled by IGL since 1998, and only 20 percent to 30 percent of population has access to PNG despite Delhi being divided into 70 charge areas corresponding to 70 assembly constituencies even after more than twenty years.

While expressing satisfaction in the long strides made in the pipeline infrastructure, the Committee are unhappy to note that the parameters of defining coverage in a particular area under a GA remain ambiguous. To reflect the actual penetration in ground reality, it is important to have a proper framework for measuring statistics of beneficiaries. The Committee desire that the Ministry/IGL should quicken the expansion of household connections to uncovered areas in Delhi to achieve 100% connection in GA areas where IGL/MGL Network are already in place. The Committee recommend that penetration levels in each district should be a major criteria of declaring the district as covered under PNG network. The Committee, therefore, also recommend that the coverage should be based on the actual number of households having access to PNG and not simply by virtue of an area being declared a charge area under a GA.

REPLY OF THE GOVERNMENT

The Committee's recommendation regarding declaration of a district as covered under PNG Network has been noted. Further, with regard to the penetration of PNG Domestic Connections in GAs authorized to Indraprastha Gas Limited and Mahanagar Gas Limited, it is submitted that these entities have been increasing the coverage of PNG Domestic Connections in their authorized GAs and have provided 10,68,545 PNG Domestic Connections in the last two years.

Ministry of Petroleum & Natural Gas O.M.No.L-15016/2/2021-GP-II, dated 14th July, 2022 **Comments of the Committee** (Please see Para No. 19 of Chapter-I)

Recommendation No. 16

Gas can accelerate renewable energy shift

The Committee observe that the future of energy lies in innovation and technological intervention in establishing a stable energy security framework. The recent announcements by Hon'ble Prime Minister during the COP26 summit regarding net-zero

emission targets by 2070, and reaching 500 GW of non-fossil fuel capacity and fulfilling 50 per cent of energy requirement from renewable energy by 2030 requires intensives and extensive development of robust energy infrastructure, will usher in a new investment climate within the country.

India has to be at the forefront in decarbonising the power sector towards net-zero emissions. India must take this transition in a smooth, reliable and affordable manner. Dissimilar technologies like coal and gas have in them the most complementing characteristics which can continue to support the grid in its operations while continuing to significantly decarbonise the sector and provide electricity at an affordable price. Gas power offers a value proposition and can turn out to be a key enabler to diversify into more renewable energy into the national grid and meet the increasing power demand in the country.

The Committee is of the opinion that Green hydrogen is attracting a lot of interest lately and there should be a strong push to bring down its cost of generation and make it affordable for a cleaner and greener future of energy. The Committee, therefore, recommend that the gas marketing PSUs like GAIL, Petronet LNG can explore the supply of gas to encourage the possibility of gas-based hybrid power plants to aid and accelerate India's renewable energy transition.

REPLY OF THE GOVERNMENT

Capacity of around 25 GW gas-based power plants exists in the country and almost 12 GW gas-based power plants are being stranded. Power pooling scheme was implemented by Ministry of Power in 2015-17 for running stranded Gas based power plant in the country. However, the scheme has not been re-implemented post 2017. GAIL remains continuously engaged with power generators in order to meet the requirements of power sector. With increasing addition of renewable sources of power, gas based power plants provide the best option for grid balancing due to faster ramping rates, low technical minimum level of operation and high part load efficiency. GAIL supplied around 14.76 MMSCMD of gas to power sector during FY 2021-22.

Around 500 GW of RE energy is proposed to be installed in the country in coming years. RE is highly dependent on weather and has inherent challenges like seasonality, reliability, diurnal variations etc. resulting in the need of grid balancing. Findings of study done by CEA, CERC, MoP and POSOCO highlight importance/benefits of gas based power in integration of RE capacity in the country. It is conclusive from their study that Gas based power is more suited to provide intermittency support than coal based. RE may be bundled with Gas power catering to intermittency. Furthermore, natural gas-based power plants are much cleaner in respect of PM, SOx, Nox & CO2 emission compared to a coal-based power plants and RE-Gas Power bundle is likely to be cleaner than RE-Coal power bundle and would reduce the adverse impact of pollution in the environment and health.

Suitable Peaking power policy for using RE-Gas bundled model is required for nudging utilities to purchase RE-Gas power to serve customers 24x7. For example, Cost of externalities of coal-based power plant may be considered in merit order dispatch and Gas based power purchase obligation can also support reviving gas power plants. Further,

there may be a possibility to operationalize gas-based power plants using domestic MDP gas from diverse areas, including gas from CBM fields, which is accessible at a competitive price or by envisaging any scheme similar to Power pooling.

Ministry of Petroleum & Natural Gas O.M.No.L-15016/2/2021-GP-II, dated 14th July, 2022 Comments of the Committee (Please see Para No. 31 of Chapter-I)

CHAPTER V

RECOMMENDATIONS/OBSERVATIONS IN RESPECT OF WHICH FINAL REPLIES OF THE GOVERNMENT ARE STILL AWAITED

Recommendation No. 7

Reorienting the role/power of PNGRB

The Committee note that 238 GAs are covering 400 districts across the country covering approximately 70 percent of the country's Geographical Areas (GA's) and 84 percent of its population with the 11th CGD bidding round.

The Committee observe that with such a network/infrastructure and large number of consumers, the safety of the pipelines and the consumers should be of utmost priority. However, till now PNGRB has a limited role in these areas as it has been empowered in authorizing entities to lay, build, operate or expand city or local natural gas distribution network. There is an urgent need to reorient the mandate of PNGRB on the lines of other regulators and needs to be empowered with monitoring and regulating the entire sector entrusted to them.

The Committee desire that Ministry should review the function of PNGRB and strengthen it further by inducting qualified manpower so as to play a more effective role in regulating the sector. The Committee recommend that Ministry of Petroleum and Natural Gas in coordination with other related Ministries should frame rules and regulations and for enforcement on safety aspects for the oil and gas sector be brought under the supervision and regulation of PNGRB so as to avoid overlapping mandates among various agencies and a centralized framework, would streamline the processes and enforce rules and regulations effectively and reduce the delays. The Committee also desire that necessary changes in legislation be brought out to this effect sooner than later.

REPLY OF THE GOVERNMENT

The recommendations of the committee have been noted and are being examined for the required amendment, if any, in PNGRB (Salary, Allowances and Other Conditions of Services of Officers and employees) Rules, 2020.Further, recommendation w.r.t. rules and regulations and enforcement on safety aspects for oil and Gas sector to be brought under the supervision and regulation of PNGRB is being also being examined by this Ministry.

Ministry of Petroleum & Natural Gas O.M.No.L-15016/2/2021-GP-II, dated 14th July, 2022 **Comments of the Committee** (Please see Para No. 16 of Chapter-I)

New Delhi; <u>04 August, 2022</u> 13 Shravana,1944 (Saka) RAMESH BIDHURI, Chairperson, Standing Committee on Petroleum & Natural Gas.

ANNEXURE-I

MINUTES STANDING COMMITTEE ON PETROLEUM AND NATURAL GAS (2021-22) TWENTIETH SITTING (04.08.2022)

The Committee sat on Thursday, the 4 August, 2022 from 1500 hrs. to 1530 hrs. in Main Committee Room, Parliament House Annexe, New Delhi.

PRESENT

Shri Ramesh Bidhuri - Chairperson

MEMBERS

LOK SABHA

- 2. Dr. Ramesh Chand Bind
- 3. Shri Girish Chandra
- 4. Shri Topon Kumar Gogoi
- 5. Shri Naranbhai Kachhadiya
- 6. Shri Santosh Kumar
- 7. Shri Rodmal Nagar
- 8. Shri Mitesh Rameshbhai Patel
- 9. Shri M.K. Raghavan
- 10. Shri Chandra Sekhar Sahu
- 11. Shri Dilip Saikia
- 12. Dr. Bharatiben Dhirubhai Shiyal
- 13. Shri Vinod Sonkar
- 14. Shri Ajay Tamta
- 15. Shri Janardan Singh Sigriwal
- 16. Dr. Kalanidhi Veeraswamy

RAJYA SABHA

- 17. Smt. Kanta Kardam
- 18. Shri Rambhai Mokariya
- 19. Shri Subhas Chandra Bose Pilli
- 20. Dr. V. Sivadasan

SECRETARIAT

1.	Shri Y M Kandpal	-	Joint Secretary
2.	Shri H. Ram Prakash	-	Director
3.	Shri Brajesh Kumar Singh	-	Deputy Secretary

2. At the outset, the Hon'ble Chairperson welcomed the Members to the sitting of the Committee. The Committee then took up for consideration the draft Action Taken Report on the recommendations contained in the Tenth Report (17th Lok Sabha) on 'Demands for Grants (2022-23) of MoP&NG' and adopted the same without any modifications.

3. Thereafter, the Committee took up for consideration Draft Action Taken Report on the recommendations contained in the Eleventh Report (17th Lok Sabha) on the subject 'National Gas Grid including PNG and CNG' and adopted the same without any modifications

| 4. | XXX | XXX. |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 5. | XXX | XXX. |

The Committee then authorised the Chairperson to present/lay the reports in both the Houses of Parliament.

The Committee then adjourned.

XXX: Matter not related to the subject.

(Vide Para 4 of the Introduction)

ANALYSIS OF THE ACTION TAKEN BY THE GOVERNMENT ON THE RECOMMENDATIONS CONTAINED IN THE ELEVENTH REPORT (SEVENTEENTH LOK SABHA) OF THE STANDING COMMITTEE ON PETROLEUM AND NATURAL GAS (2021-22) ON 'NATIONAL GAS GRID INCLUDING PNG AND CNG'.

I	Total No. of Recommendations	16
II	Recommendations/Observations which have been accepted by the Government (Vide Recommendations Nos. 1, 2, 4, 5, 6, 8, 9, 11,12,13,14 and 15)	12
	Percentage to Total	75.00%
III	Recommendations/Observations which the Committee do not desire to pursue in view of Government's (Vide Recommendations No. Nil)	00
	Percentage of Total	00
IV	Recommendations/Observations in respect of which replies of the Government have not been accepted by the Committee (Vide Recommendations Nos. 3, 10 and 16)	03
	Percentage of Total	18.75%
V	Recommendations/Observations in respect of which final replies of the Government are still awaited (Vide Recommendation No. 7)	01
	Percentage of Total	06.25%