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भारत सरकार/Government of India

पेट्रोलियम और प्राकृतिक गैस मंत्रालय/Ministry of Petroleum and Natural Gas ****

Shastri Bhawan, New Delhi Dated: 17th February, 2021

Sub: Strategies to increase LNG usage as Transport Fuel and in Mining Sector - reg.

The undersigned is directed to inform that a meeting was held on 15.10.2020 under the chairmanship of Hon'ble Minister, PNG & Steel to discuss "Strategies to increase LNG usage as Transport Fuel and in Mining Sector". In the said meeting, one of the decisions was taken that "LNG as auto fuel should be freely traded across the country for the development of Gas Based Economy and policy in this regard may be developed". Accordingly, a draft LNG Policy (copy enclosed) has been prepared.

2. In this regard, it is requested to furnish the comments, if any, within 15 days of issue of this communication to the undersigned.

Encl: As above.

(Raj Kishore)

Forishe 17/2/1021

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Draft LNG Policy

Preamble:

India is the 3rd largest energy consumer in the world after China and USA. We are among top 13 globally in gas consumption in quantity terms. Every 1 MMSCMD of natural gas usage as a substitute for polluting liquid fuels can reduce around 2.7 lakh tons of CO2 emission per annum. LNG as import substitute of liquid fuel can also save foreign exchange in the tune of 200 million USD per MTPA.

There is also an urgent need for reducing environmental pollution and consequent carbon foot print in line with India's COP 21 commitments in UN Framework Convention on Climate Change extended in Paris Agreement. For the same, Government has planned to increase the share of natural gas in primary energy basket to 15% by 2030 from the current share of 6.3% for the creation of gas-based economy. This requires increasing adoption of environmentally cleaner, cost efficient and technologically adaptable fuel by various industrial sectors. Liquified natural Gas (LNG) has emerged as one such fuel. Thus, a need has arisen for an integrated policy for the procurement, storage, transportation and use including sale and marketing of LNG.

Aims and Objectives:

The key aims and objectives of the policy is to-

- i. Frame an integrated approach towards procurement, storage, transportation and use of LNG, including its by-products such as boil offs.
- ii. Ensure equitable distribution and adequate availability of LNG for all technologically feasible sectors
- iii. Promote increased use of LNG in various sectors including in transportation and in mining sector.
- iv. Ensure stable, transparent and enabling framework for activities related to LNG.
- v. Promotion of new technologies related to LNG.
- vi. Promotion of adoption of LNG for usage in green-field sectors i.e. where LNG is not being used in any manner currently.

Strategy and approach:

The above-mentioned aims and objectives of the policy shall be achieved in the following manner-

Upstream:

<u>LNG terminals and regassification facility</u> – The policy focusses on creation of LNG terminal and regassification facility to take care of the import needs of LNG. LNG terminals with capacity more than 100 MMTPA is envisaged to be created

along the coastal regions to achieve the vision of taking natural gas share in primary energy mix to 15% by the year 2030. For this purpose, the policy shall strive towards creation of free and competitive re-gasification market including on-shore and off shore facilities to take care of gas needs of all areas including those away from the mainland like A&N and Lakshadweep. The policy aims to create a regasification capacity of 70 MMTPA by 2030 and 100 MMTPA by the year 2040. The policy also aims at developing common carrier capacities in LNG terminals.

<u>Virtual pipelines and enabling infrastructure</u> – It is important to create facility for transporting LNG to all areas of consumption, including industrial and commercial areas. The policy shall aim to create virtual pipelines of LNG by transporting it through rail and also through LNG truck loading. Necessary infrastructure and enabling environment for the same shall be created in consultation with all stakeholders. Promotion of manufacturing of LNG ships, FSRUs and other critical infrastructure for the enhancing the use of LNG shall be ensured in coordination with automotive and engineering Public and Private sector players and government regulatory agencies.

Mid stream -

Dedicated highways with extensive LNG infrastructure: To promote LNG trucking and its use as transport fuel, dedicated highways/lanes with extensive LNG infrastructure shall be promoted. LNG dispensing and availability shall be ensured across golden quadrilateral and all major highways, industrial and commercial centres.

<u>High volume closed loop truck circuits</u>: Use of LNG as transport fuel in high volume closed circuit loops will enable enhance penetration of LNG as fuel. These circuits will be developed in areas such as mining areas, refineries, etc.

Conversions of transport vehicles to LNG based transmission: Conversion of all long haul heavy duty trucks and other similar automotive to LNG based transmission shall be promoted so as to achieve the target of 10% of all such automotive to be LNG based. Automotive companies shall be encouraged to manufacture new varieties of trucks/ other vehicles based on LNG transmission.

<u>Mobile dispensing</u>: Mobile dispending of LNG shall be a catalyst for faster penetration and adoption of LNG as fuel across all sectors. The policy aims at promoting suitable enabling regulatory environment for mobile dispensing of LNG regarding the safety and technical aspect of the same.

<u>Create enabling regulatory environment in respect of safety and technical requirements</u>: Creation of enabling regulatory environment in respect of safety and technical standards for the storage, transport and usage of LNG and ancillary equipment shall be ensured in consultation with PESO, other Ministries and stakeholders.

<u>Partnering automotive industry for enhancing manufacturing facility</u>: Domestic manufacturing of LNG storage tanks, transport vehicles, etc. shall be promoted to create a synergy between the different aspects of LNG usage and to establish a hub for original and ancillary manufacturing activities for the LNG sector.

<u>Gas Exchange</u>: The policy aims at promoting sale and marketing of LNG at gas exchange to develop spot and other possible markets for the same. This will help deepen the gas market.

Down stream:

LNG stations: The policy aims at establishing 1000 LNG stations for ensuring availability of LNG for long haul, heavy duty trucks and other automotive covering all major highways, industrial and commercial centers, etc.

Marketing and Sale of LNG: Marketing and sale of LNG as a vehicular fuel shall be a free activity and not have any restriction as to the quantity, area or any other parameter except the safety and technical parameters. Any entity including CGD entity can set up their own LNG storage and distribution facility. For this purpose, any activity, including sale / marketing thereof, related to boil-off gas from LNG, shall be deemed to be incidental or ancillary to the activity of marketing and sale of LNG, and it shall be treated accordingly.

Enhancing use of LNG as transport fuel in long haul heavy duty trucks: Use of LNG as fuel in heavy duty long haul trucks /other vehicles shall be promoted by incentivizing the development of new LNG compatible models or retrofitting of these vehicles through tax/ cess exemptions, permits, green certifications, etc.

Adoption of LNG in green field areas: Use of LNG shall be explored and promoted in sectors where it is not being used in any manner currently.

Research and Development:

Explore and promote new technologies: The policy strives promote research and development institutions under the administrative control of MoPNG viz. RGIIPT, IIPE and others to explore new technologies for establishing a value chain for LNG including usage of waste cold for district cooling, etc. All efforts shall be made to explore possibilities of adoption of technology to enable greater use of LNG in brownfield sectors (i.e where they are already being used) and also for adoption of LNG for usage in green-field sectors (where LNG is not being used in any manner currently) like mining, etc.

<u>Creation of start-up environment</u> - All effort shall be made to involve start-ups for creation of an ecosystem for promotion of disruptive technologies and bring about a paradigm shift in the value chain related to LNG leading to enhanced usage in all technically feasible sectors.