Petroleum and Natural Gas Regulatory Board

Press Release

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PNGRB takes Initiative for Hydrogen transportation in Natural Gas Pipeline Network and City Gas Distribution Networks

The Government of India has taken significant strides towards promoting Hydrogen as a vital component of its clean energy agenda. The Natural gas pipelines network has the potential for transporting Hydrogen from producing locations to consumption areas, and the use of Hydrogen blended Natural Gas in City Gas Distribution (CGD) networks reduces emissions. The Petroleum and Natural Gas Regulatory Board (PNGRB) continues to drive sustainable energy initiatives in India by promoting Hydrogen blending into Natural Gas (NG) infrastructure.

Recognizing the potential impact of Hydrogen blending on the energy sector, various steps have been initiated for utilization of Natural Gas network for Hydrogen transportation. PNGRB in collaboration with the World Bank, has initiated a study to develop pathways for Hydrogen transmission in natural gas pipelines and City Gas Distribution networks. The study comprises of mapping demand and supply of Hydrogen, Technical Assessment of the existing Pipeline network for its compatibility, Commercial assessment of pipeline sector, identifying bottlenecks in of Policy and Regulatory Framework and framing of roadmap milestones till 2040 for expeditious implementation of Hydrogen blending in India. A presentation was made before PNGRB Board on 04.08.2023 at PNGRB Office, New Delhi. During discussion, PNGRB Board emphasised the need for expeditious implementation of Hydrogen Blending and effective utilisation of exiting network towards achieving the National Goal. The study is expected to be completed within 16 weeks.

It is notable that Natural gas pipelines are the preferred mode for transportation of Hydrogen. This study is aimed at developing Technical and Commercial feasibility for blending of Hydrogen in Natural gas pipelines that have been authorised by the Board. The Regulatory Frameworks will be suitably amended to facilitate the achievement of 5 MMT (Million Metric Tonne) per annum target of Hydrogen consumption by 2030.

Further, PNGRB has also issued permission to three CGD entities for trial blending projects in their respective authorized Geographical Areas and Hydrogen injection up to 5% vol in Natural gas has been achieved in low pressure MDPE network. These pilot projects signify a significant milestone in India's energy transition journey and pave the way for a greener and cleaner energy future. PNGRB remains committed to fostering sustainable energy solutions and promoting renewable energy integration in the natural gas infrastructure.