Manak Manthan Program on New Indian Standards held by Bureau of Indian Standards, Bangalore in collaboration with LPG Equipment Centre Bangalore













A Manak Manthan Programme was held recently by the Bureau of Indian Standards Bangalore for a detailed discussion on the Draft Indian Standard for the Sixth Revision of IS 4246, domestic gas stoves for use with liquefied petroleum gases — specification for comments from all stakeholders. Such programmes are held by BIS branches across the country to invite suggestions and opinions on new standards under formulation and updation of existing standards in line with international standards. Through such programmes BIS intend to take the process of standardization closer to all stakeholders for encouraging faster adoption and simultaneously taking feedback on anticipated challenges and opportunities.

The Chief Executive Officer of LPG Equipment Research Centre Bangalore Shri T D Sabu, who is also the chairman of the MED-23 subcommittee on LPG burners and Appliances of the BIS, was the Chief Guest of the Manak Manthan Program . Detailed discussions were held on various provisions of the standards especially in view of the changing tastes of the customer. The standard specifies requirements for appliancesranging from humble single burner steel stoves to Four burner glass top stoves and Hobs. More than a hundred BIS certified manufacturers are present in the country and more than 35 supply to the end customers through the OMC network there by ensuring the reach of quality-assured cooking appliance to the LPG consumers of all strata of society. The high efficiency LPG stove developed by LERC which is marketed through the OMC channels is a prime example of the end customer benefiting from coordinated and standardized efforts extracting the maximum value from this fuel.

Shri T D Sabu addressed the gathering and expanded on the various initiatives undertaken by LERC and OMCs to address the safety concerns and improve the cooking experience and thereby the lives of the domestic customer. The queries raised by the participants during the program of Manak Manthan were replied to their satisfaction by CEO-LERC, Bangalore and BIS team at the end.

Few of the photographs taken during the program of Manak Manthan held at Bureau of Indian Standards, Bangalore Branch Office are attached.

<u>Two day Training Program (13.05.2024 to 14.05.2024) for OMC Officers on Testing and Inspection of LPG Equipments at LERC, Bangalore</u>









As a part of building up the capabilities of OMC officers in inspection and testing of LPG related equipments, appliances and consumables, LPG Equipment Research Centre (LERC), Bangalore conducted a two-day Training Program on 13.05.2024-14.05.2024. The program covered the various testing protocols and test requirements of cylinders, valves, regulators and other consumables for a batch of around 14 OMC officers from IOCL BPCL and HPCL Plants and state offices. The training was the Sixth in a series of programs targeted at increasing the technical knowledge of LPG officers of OMCs so as to enable them to control the quality requirements at a better level. Especially in view of the increased number of LPG customers and the manifold jump in the number of LPG equipments in use in the country an urgent need has been felt to form a team of officers whose competency will include detailed knowledge of the testing protocols and the test standard requirements.

CEO- LERC, Bangalore Shri T D Sabu began the session with a presentation which a brief on LERC's Vision & Values, Mission, Management Hierarchy, Key Activities, Recognitions & Patents and Trademarks etc. The various research and development activities at LERC were also discussed. Further Sh Jagath B C (Research Engineer), LERC, Bangalore made a detailed presentation on testing of LPG Equipment i.e., LPG Cylinders, SC Valves and Domestic Pressure Regulators at LERC, Bangalore.. On the second day, Sh Santosh Kumar Gupta, Chief Manager (Research) LERC presented the details on testing of Suraksha Hose, Tamper Evident Seal, Safety Caps, O-Rings. Subsequently, Sh Bhuvaneshwari M, Manager (Research) presented details on testing of LPG Stoves. The unique feature of these series of programs were the practical hands on training immediately following the classroom session in the laboratories which help in cementing the learning in the officers inds.

The queries raised by the participating LPG Officers of IOCL, BPCL & HPCL during each of the sessions of the Twoday Training Program were replied to their satisfaction by CEO-LERC, Bangalore and his team at the end. The feedback from the officers were discussed in detail and certificates awarded to the participants.

Few of the photographs taken for two days Training Program held at LERC, Bangalore are attached.

Chairman visits LPG Equipment Research Centre in Bengaluru on 23.05.2024



Chairman, with senior officials and team LERC

Mr S M Vaidya, Chairman, recently visited the LPG Equipment Research Centre (LERC) in Bangalore to review and assess the various projects undertaken to combat the menace of domestic LPG accidents. Detailed discussions were held on various initiatives, and guidance was provided for accelerating and implementing modifications in DPRs and SC Valves. A new project aimed at replacing conventional tight joints in domestic pressure regulators with LERC-designed tight joints has been initiated in Bangalore to address the issue of leakages. Mr Vaidya reviewed the preparedness for launching the project on a nationwide scale, especially targeting the low-income strata of society.

Earlier, on arrival at the LERC campus, Chairman was accorded a warm welcome by the LERC Team led by Mr T D Sabu, CEO, LERC. During the visit, Mr Vaidya conducted a detailed review of all activities at LERC and interacted with the staff. He observed various testing activities and appreciated the professional demeanour of the staff. Mr Sabu guided Mr Vaidya through the various laboratories and explained the different types of equipment.



Chairman, being apprised about various equipment & facilities at the laboratories

On the occasion, Chairman inaugurated a one-of-its-kind Liquid Offtake Valve Testing facility at LERC. He also laid the foundation stone for a new building to house newly planned laboratories and to decongest the existing ones.

The LPG Equipment Research Centre (LERC) in Bangalore is a unique joint venture of three major Indian oil undertakings - IndianOil, BPCL and HPCL. Established in 1990, LERC focuses on the research, development and testing of LPG-related equipment, aiming to standardise and modernise LPG equipment used in India. Over the years, LERC has emerged as a premier research institute in various facets of energy, closely associated with the Petroleum and Explosive Organisation and the Bureau of Indian Standards.

Two day Training Program (13.06.2024 to 14.06.2024) for OMC Officers on Testing and Inspection of LPG Equipments at LERC, Bangalore











As a part of building up the capabilities of OMC officers in inspection and testing of LPG related equipments, appliances and consumables, LPG Equipment Research Centre (LERC), Bangalore conducted a two-day Training Program on 13.06.2024-14.06.2024. The program covered the various testing protocols and test requirements of cylinders, valves, regulators and other consumables for a batch of around 16 OMC officers from IOCL BPCL and HPCL Plants and state offices. The training was the Seventh in a series of programs targeted at increasing the technical knowledge of LPG officers of OMCs so as to enable them to control the quality requirements at a better level. Especially in view of the increased number of LPG customers and the manifold jump in the number of LPG equipments in use in the country an urgent need has been felt to form a team of officers whose competency will include detailed knowledge of the testing protocols and the test standard requirements.

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The queries raised by the participating LPG Officers of IOCL, BPCL & HPCL during each of the sessions of the Two-day Training Program were replied to their satisfaction by CEO-LERC, Bangalore and his team at the end. The feedback from the officers were discussed in detail and certificates awarded to the participants. Few of the photographs taken for two days Training Program held at LERC, Bangalore are attached.

38th Executive Committee Meeting of LERC, Bangalore



Group photograph taken at LERC, Bangalore

The 38th Executive Committee Meeting of LPG Equipment Research Centre (LERC), Bangalore was held at LERC premises recently and was attended by Mr K Sailendra, ED (LPG), IndianOil, Mr Anuj Kumar Jain, ED (LPG), HPCL, Mr D V Mamadapur, ED (LPG), BPCL and Mr T V Pandian, ED (LPG), BPCL, along with other senior officials of all three oil companies. The meeting covered a discussion of performance highlights, a discussion on new products/projects, technical discussions on various studies conducted by LERC and testing activities of LPG equipment. The meeting was presided over by Mr K Sailendra, who is also the Chairman of the Executive Committee. Mr Santosh Kumar Gupta, Chief Manager (Research) and Mr T D Sabu, CEO, LERC, made a detailed presentation on the various highlights of the past year and ongoing projects and plans. Various infrastructural projects being undertaken by LERC were reviewed in detail by the committee. The committee also debated on the progress of the various technical targets given during the recent visit of Chairman, IndianOil to LERC. The vote of thanks was given by Mr Bathini Sivakumar, Secretary cum Treasurer.

LERC, Bangalore is a unique joint venture of the three major Indian oil undertakings, which specifically deals with the research, development, and testing of LPG-related equipment. IndianOil, BPCL and HPCL had envisioned the establishment of this R&D facility in 1990 to standardise and modernise the LPG-related equipment used in India. Over the years, LERC Bangalore has emerged as a premier research institute in various facets of energy closely associated with the Petroleum and Explosive Organisation and Bureau of India Standards. The executive committee looks after the day-to-day management of the Centre in coordination with the CEO. (T D Sabu, CEO, LERC, Bangalore)

Petroleum and Natural Gas Regulatory Board

Press Release

Date - 27.06.2024

PNGRB organized a roundtable discussion on Adopting High Efficiency Domestic PNG Stoves



Petroleum and Natural Gas Regulatory Board (PNGRB) is taking multiple steps to promote the adoption of Piped Natural Gas (PNG) among households and to expand PNG consumer base. Presently, there are 1.3 crore PNG connections across the country which is expected to increase multifold (in line with the National Goal of enhancing Natural Gas share in the Energy Mix to 15% by 2030). PNG is a convenient cooking fuel and has been receiving enthusiastic response across the country.

Recognizing the importance of energy efficiency, PNGRB organized a Roundtable Discussion on 27th June 2024 with all stakeholders to understand the overall landscape of PNG Stoves vis-à-vis Retrofitted LPG Stoves. With rising import dependency in natural gas and the harmful effects of incomplete combustion, it is of utmost importance that the PNG cookstoves are efficient. The Board has been advocating the use of BIS certified PNG cookstoves in place of retrofitted LPG cookstoves.

Dr Anil Kumar Jain, Chairperson, PNGRB in his keynote address mentioned the importance of efficient energy utilization in the country and highlighted the country's transition from traditional fuels to renewable fuels. He further emphasized that attractive business models such as buy-back of LPG cookstoves, recovery of cost of new PNG stoves in easy installments etc. could play a vital role in promoting an ecosystem of energy saving as well as safeguarding environmental aspects. It is well documented that efficient cookstoves could recover their cost by savings in gas consumption over a short period.

PNGRB Board Members and Secretary also acknowledged the rapid growth potential of PNG domestic customers in the near future and identify practical pathways to establish PNG stoves as widely accepted throughout the country. They also strongly advocated the adoption of dedicated appliances designed specifically for the fuel they utilize, ensuring efficient and safe combustion.

In the roundtable discussion, representatives from various Academic Research Institutions (CSIR-IIP & LERC), CGD Entities & Stove Manufacturer companies deliberated on adoption of highly efficient domestic PNG stoves. Presentations were made by Indian Institute of Petroleum, which clearly demonstrated the advantages offered by PNG cookstoves dedicated to this fuel in place of retrofitted LPG Cookstoves.

LPG stoves are designed for minimum 68% thermal efficiency. However, the conversion of these LPG stoves for PNG use, reduces their thermal efficiency to about 45-50%. As an estimate, each domestic connection having average 4 family members that switches from an LPG-retrofitted stove to a dedicated high efficiency PNG stove can save an average of 0.125 SCM/day leading to 20-25% savings on monthly gas bill of domestic consumers and reducing GHG emissions.

This gathering marked a significant milestone towards PNGRB's commitment to promote innovative solutions for a cleaner, safer and sustainable Energy future. PNGRB officials offered to support this drive through financial support to R&D, demand aggregation of cookstoves across CGD companies and a mass media campaign to educate the consumers of advantages in efficient PNG cookstoves.















CEO, LERC, delivers keynote presentation in roundtable discussion on High Efficiency Domestic PNG Stoves



CEO, LERC, delivering the presentation

Recognising the importance of energy efficiency, the Petroleum & Natural Gas Regulatory Board (PNGRB) recently organised a roundtable discussion with all stakeholders to understand the overall landscape of PNG Stoves visà-vis Retrofitted LPG Stoves. Mr T D Sabu, CEO, LPG Equipment Research Centre (LERC), made a comprehensive presentation on high-efficiency PNG stoves and the efforts made by LERC in contributing to conservation by increased efficiencies of the hotplates. Special emphasis on domestic consumer safety was also paid by explaining about the pedigree of LERC in developing and popularising the Suraksha Hose.

LERC elaborated on the precautions to be taken while CGD are procuring the hoses for the PNG households. The conference was inaugurated by Dr Anil Kumar Jain, Chairperson, PNGRB. PNGRB is a statutory body to regulate downstream activities in India's petroleum & natural gas sector. PNGRB is taking multiple steps to promote the adoption of Piped Natural Gas (PNG) among households and to expand the PNG's consumer base. (T D Sabu, CEO, LERC, Bangalore)

Two day Training Program (25.07.2024 to 26.07.2024) for OMC Officers on Testing and Inspection of LPG Equipments at LERC, Bangalore









As a part of building up the capabilities of OMC officers in inspection and testing of LPG related equipments, appliances and consumables, LPG Equipment Research Centre (LERC), Bangalore conducted a two-day Training Program on 25.07.2024-26.07.2024. The program covered the various testing protocols and test requirements of cylinders, valves, regulators and other consumables for a batch of around 17 OMC officers from IOCL, BPCL and HPCL Plants and state offices. The training was the Eighth in a series of programs targeted at increasing the technical knowledge of LPG officers of OMCs so as to enable them to control the quality requirements at a better level. Especially in view of the increased number of LPG customers and the manifold jump in the number of LPG equipments in use in the country an urgent need has been felt to form a team of officers whose competency will include detailed knowledge of the testing protocols and the test standard requirements.

CEO- LERC, Bangalore Shri T D Sabu began the session with a presentation which a brief on LERC's Vision & Values, Mission, Management Hierarchy, Key Activities, Recognitions & Patents and Trademarks etc. The various research and development activities at LERC were also discussed. Further Sh Jagath B C (Research Engineer), LERC, Bangalore made a detailed presentation on testing of LPG Equipment i.e., LPG Cylinders, SC Valves and Domestic Pressure Regulators at LERC, Bangalore.. On the second day, Sh Karthik J (Research Engineer), presented the details on testing of Suraksha Hose, Tamper Evident Seal, Safety Caps, O-Rings. Subsequently, Sh Bhuvaneshwari M, Manager (Research) presented details on testing of LPG Stoves. The unique feature of these series of programs were the practical hands on training immediately following the classroom session in the laboratories which help in cementing the learning in the officers inds.

The queries raised by the participating LPG Officers of IOCL, BPCL & HPCL during each of the sessions of the Two-day Training Program were replied to their satisfaction by CEO-LERC, Bangalore and his team at the end. The feedback from the officers were discussed in detail and certificates awarded to the participants.

Few of the photographs taken for two days Training Program held at LERC, Bangalore are attached.