

Natural gas shortages in Pakistan – The true story

Summer Vs Winter

It has been observed that the natural gas shortages become very acute and aggravated in the winter than in the summer. The reason is the enhanced demand due to space heating and geyser loads that largely kick in the winters, but there is more to it than meets the eye.

The natural gas shortages have become endemic and will never be mitigated unless we understand the underlying reasons that further aggravate the situation in the winter and bring about leakage remedial measure in the natural gas distribution network.

The Leaking Distribution Networks

It has been now well established that the distribution network in the towns and cities are profusely leaking. This is manifested in an average annual 10% growth in Gas losses termed as “Un Accounted for Gas”

There is a very erroneous and general belief in the two utility companies that all these gas losses are because of theft. Humungous effort is being expended towards theft control in the two utility companies, yet gas losses are continuously increasing year after year. There is no denying that gas theft is a factor but the fast deteriorating condition of gas distribution networks have a significant role to play in the impending gas shortages in the winters.

The Role of Pressure on Supply of Natural gas

It is quite logical to say that in times of high demand, the supply pressure of gas in the distribution networks is jacked up. This is done to ensure availability of natural Gas to the tail ends. Thus during the winters, with enhanced consumer demand, the distribution networks are operated at a higher pressure than in the summer. This result in high gas losses from the leaking networks thus perpetual shortage of Natural Gas in the winters, year after year. It is being opined that if we had more natural gas available or injecting expensive LNG in the distribution network this will resolve the problem. Nothing can be further than the truth. Injecting more natural Gas in the system operating at high pressure is like pouring water in a profusely leaking bucket.

Natural Gas Saving Techniques used by the Utility Companies

The companies have resorted to lowering system pressures during off peak hours, especially during the night. Lowering system pressure reduces the leakages and saves

Natural Gas. However the practice is now being done very aggressively resulting in extinguishing of geysers at night and low pressure complains from the consumers. This practice is very dangerous in the winters where people do overnight space heating while asleep. Extinguishing of space heaters at night and restoration of gas in the early hours may cause fatal accidents due to natural gas suffocation.

Conclusion

Natural Gas Shortage is going to remain. Injecting more gas in the leaking distribution system is akin to throwing good money after bad money. There are two solutions that come to the mind:

- Rehabilitation of the leaking distribution networks
- Switch from Natural Gas to LPG in the Domestic and Commercial sectors.

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