

PAKISTAN'S LNG CRISIS: AN ESCALATION OF POWER CRISIS

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The energy crisis is going to be severe in the coming weeks since Pakistan is not able to procure LNG at an affordable rate. This has been exacerbated due to its unavailability from the international market in the wake of the Russia-Ukraine War. The global Liquefied Natural Gas (LNG) shortages have pushed the fuel prices to a record high while increasing countries' vulnerability to commodity market shock. According to Musadik Malik, State Minister for Petroleum, Pakistan simply can not compete with the buying power of European countries who are also potential customers for the same reserves that Pakistan desperately needs.¹

Pakistan ranks 29th among the countries holding natural gas reserves, with total extractable potential around 24 trillion cubic feet (TCFT), with 4 billion cubic feet (BCFT) daily gas production, meaning it has about 12 years of gas left. The alarming situation for the country is that the supply of natural gas is declining day by day from domestic sources as the consumer need is continuously increasing. The biggest consumer of natural gas is the power sector followed by residential.²

To overcome the gas shortage in the country over the past decade the government has started relying heavily on imported LNG. Initially, LNG was introduced to meet the supply gap but now it has

¹ Imran Ayub, "Pakistan losing LNG bidding war to Europe," Dawn, June 26, 2022, <https://www.dawn.com/news/1696772/pakistan-losing-lng-bidding-war-to-europe>

² The Newspaper's Staff Reporter, "Pakistan ranks 29th among countries having gas reserves," Dawn, June 26, 2022, <https://www.dawn.com/news/1696715/pakistan-ranks-29th-among-countries-having-gas-reserves>

a share of 25% of gas supply for LNG power plants in Pakistan. Pakistan currently imports LNG through a government-to-government 15-year contract agreement with Qatar on a take-or-pay basis and four arrangements with private vendors in Italy and Qatar. Over the last three years, these term agreements have accounted for more than 87% of all LNG shipped into Pakistan. The remainder 13% was made up of spot purchases to meet demand that exceeded the term commitment. Though Pakistan has increased its reliance on LNG for electricity generation, it is facing widespread power outages as procurement of the chilled fuel remains unreliable and expensive. The spot prices have affected the purchasing strategy of LNG which is left up to 40% of supply.³



Current Situation

The surge in global gas prices due to shortages in Europe has pushed Asian LNG to records for this year. That's forced Pakistan to pay the most ever for spot shipments to top up supply under long-term contracts, or even forgo them altogether. Pakistan has decided not to accept the single bid for LNG cargo it received for delivery in July 2022 at a record USD 39.8 per million British thermal unit (mmBtu) for being too expensive and unaffordable amid rising electricity prices and shortages. Therefore, Pakistan would have again only 8 LNG cargoes of about 800 million cubic feet (mmcfd) in July all under Qatar's long-term contract. LNG shortages have forced 3,500 megawatts of electricity capacity offline since December 2021 and have contributed to nationwide load shedding of 10-18 hours a day in recent weeks.⁴

³ News Desk, "Pakistan LNG gets single bid from Qatar Energy at \$39.80/mmBtu for July cargo," MG Link, June 23, 2022, <https://mettisglobal.news/pakistan-lng-gets-single-bid-from-qatar-energy-at-39-80-mmBtu-for-july-cargo/>

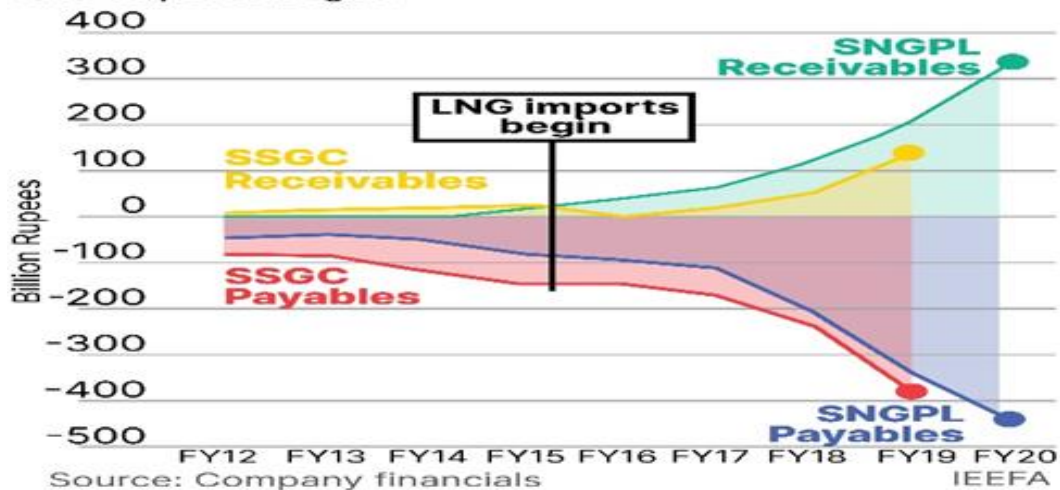
⁴ Khaleeq Kiani, "Govt opts for loadshedding over expensive LNG," Dawn, June 25, 2022, <https://www.dawn.com/news/1696550/govt-opts-for-loadshedding-over-expensive-lng>

The suppliers in the spot market besides the producers in the Middle East had been influenced by the US government to ensure maximum LNG supplies to the European countries, already lifting the commodity at any price to meet energy shortages caused by supply disruptions from Russia. Coupled with a surge in coal and oil prices, these LNG rates have pushed up electricity fuel costs by over 100%. Since the textile industry depends on gas-based power generation, rising LNG prices have grossly reduced profit margins as in the textile sector, power generation costs can amount to roughly 30-40% of the production costs. In January 2022 gas shortage led to Pakistan losing 20% of vital textile exports which amounted to about USD 250 million after mills in Punjab were forced to shut for 15 days. Therefore, greater reliance on imported LNG would only reinforce credit risks for investors in the country's LNG-to-power value chain.⁵

The fertilizer sector also has an entrenched dependence on natural gas as a fuel and feedstock, but the sector pays among the lowest prices despite high costs. Fertilizer accounts for 16% of national gas consumption, but only 3% of revenues of state-owned gas transmission companies. The fertilizer sector's dependence on imported LNG will exacerbate the shortages and high prices of fertilizers. It will have harmful impacts on crops, poultry, and livestock, posing serious threats to the country's food security, industrial growth, employment, and exports.⁶

Pakistan's Gas Sector Circular Debt is on the Rise

Financial health of gas utilities has deteriorated since LNG imports began



According to a research report released by the Institute for Energy Economics and Financial Analysis (IEEFA), Pakistan's shift to imported LNG is undermining the country's energy security and financial

⁵ The Newspaper's Staff Reporter, "Reliance on LNG exacerbating energy insecurity," Dawn, June 17, 2022, <https://www.dawn.com/news/1695210/reliance-on-lng-exacerbating-energy-insecurity>

⁶ Azhar Lashari, "The fault in our fertilizer industry," The News, June 26, 2022, <https://www.thenews.com.pk/tns/detail/968864-the-fault-in-our-fertiliser-industry>

stability. The country's LNG imports can rise to more than USD 32 billion by 2029-30, up from nearly USD 2.6 billion in 2020-21 as LNG sourced from global markets has become five to 10 times more expensive than domestically produced gas.⁷

Over the last decade, emerging nations including Pakistan built LNG import strategies on the premise that the fuel would be abundant and cheap for the foreseeable future, as it was during the past several years. That came to a halt this year as Asian LNG rates soared. Pakistan does get more than half its LNG under long-term contracts, which provides some protection against the volatile spot market. Furthermore, Qatar has agreed to increase supply under those term deals, but the nation still requires spot shipments.⁸

Conclusion

Pakistan's inability to service fuel-related debt amidst rising fuel prices and a severely weakening rupee has not only led to fuel shortages in the power sector but has also given rise to widespread load-shedding and rising energy bills. Therefore, instead of rapidly ramping up LNG imports, Pakistan's near-term focus should be on using the existing LNG supply more efficiently by changing regulatory incentives, rationalizing tariff structures, and implementing energy efficiency programmes.

More coherent strategies for LNG procurement and tenders, along with maximizing the utilization of existing LNG terminals, can also help improve energy security without major new infrastructure additions. The promotion of energy efficiency equipment and more cost-reflective tariff structures can incentivize more efficient use of gas to reduce import needs. Furthermore, the current situation could have been avoided had the government diversified the energy supply by incorporating a higher share of renewables in the energy mix.

⁷ Haneea Isaad, "Pakistan's dependence on imported LNG exacerbates energy insecurity and financial instability," IEEFA, June 16, 2022, <https://ieefa.org/articles/pakistans-dependence-imported-lng-exacerbates-energy-insecurity-and-financial-instability>

⁸ Verity Ratcliffe, "Pakistan's dependence on natural gas is turning into a nightmare," Aljazeera, September 28, 2021, <https://www.aljazeera.com/economy/2021/9/28/pakistans-dependence-on-natural-gas-is-turning-into-a-nightmare>