INDIA'S LNG IMPORT PLANS GATHER PACE

With its growing population, fast expanding economy and rising per capita income, India is becoming a leading consumer of energy. LNG imports will play a bigger role, allowing coastal regions access to cleaner electricity.

The current Narendra Modi-led government has been working on encouraging wider use of cleaner energy sources such as natural gas, in the interests of the nation's health.

It has set a target of increasing the share of natural gas in the energy mix from today's 6-7% to 15% by 2022. However, with insufficient domestic production and pipeline projects like TAPI, which envisages to bring Turkmen gas to India, in limbo, the south Asian nation has been relying heavily on imported LNG to meet local demand. The government estimates that India imports about half the natural gas it consumes as LNG. India is now a major buyer in the global LNG market and is the largest importer of the commodity in the world after Japan, China and Korea.

As demand for gas is projected to rise much faster than local production, India's LNG import and regasification capacity is expected to expand significantly in the near future. As of today, India has four operating LNG terminals: Dahej, Hazira, Dhabol and Kochi, all on the west coast. According to the Indian oil ministry, India's LNG terminal capacity could more than double from 30mn mt/yr by 2022 as existing terminals expand and new ones are commissioned. Some of these are expected to come up on the Indian east coast to serve the undersupplied, but densely populated, eastern Indian states such as West Bengal, Bihar, Jharkhand and Uttar Pradesh.

There could be five of these, including: Indian Oil Corporation's terminal at Ennore in the state of Tamil Nadu; the Krishna Godavari LNG Terminal, a special purpose vehicle created by US-based Vessel Gasification Solutions Group which would be a floating terminal at Kakinada in the state of Andhra Pradesh; H-Energy's floating terminal at Digha in the state of West Bengal; Adani Group's Dhamra terminal in the state of Odisha; and AG&P's floating terminal, also in Tamil Nadu.

AG&P terminal to be ready mid-2019

Last November, Philippines-based AG&P signed an exclusive agreement with Karaikal Port Private (KPPL) in Tamil Nadu to develop an LNG import terminal at the port and source and supply LNG. The initial capacity of the terminal is 1mn mt/yr. It is expected that the capacity will double to 2mn mt/yr in the near term, and the projected final capacity is 3mn mt/yr. It will be connected to the pipeline network which is owned and operated by India's biggest gas marketing company Gail.

AG&P's in-house engineering team in Houston, Texas, is in advanced stages of the front-end engineering and design (Feed), and completion is expected by Q2 2018. Alongside, financial advisors have been appointed to achieve final investment decision (FID) that will follow once the Feed is concluded.

"The LNG import terminal in Karaikal Port is expected to be commissioned by mid-2019. The speed of development is made possible because of AG&P's unique approach of offering a single platform for in-house engineering, standardised designs and modular construction, thereby eliminating expensive, bespoke engineering costs and significantly accelerating schedule," said AG&P's CFO and commercial head, Abhileh Gupta. He told *NGW* that this will be the fastest LNG terminal development in India.

Project execution will be done simultaneously, both on site in Karaikal and at AG&P's heavy fabrication and assembly yards in the Philippines, where the modular regasification units will be built. "This parallel scheduling dramatically reduces construction time, while improving operational efficiencies," Gupta said.

At the time of signing the agreement with KPPL, AG&P executed exclusivity with PPN Power to supply regasified LNG (R-LNG) to its six nearby power stations. The project management team is already in place.

"A marketing team has also been established in Chennai, to aggregate this customer demand. A two-month data collection study has been completed identifying potential customers within a 300 km radius of the terminal," Gupta said.

Once operational, the terminal will provide access of gas to both gas-fired power plants and major manufacturing clusters in Puducherry and Tamil Nadu, including the fertiliser, cement, steel, textile, leather, sugar and garment industries.

Gupta said AG&P is committed to investing more than $600mn in energy projects in India over the next five years. Most of these investments will be in import terminals and gas distribution infrastructure to connect areas that have no access to gas supply. “The details of these projects remain commercially confidential and will be announced in due course,” he said.

LNG import dependency to continue

Although India has been trying to reduce its dependence on imported LNG by encouraging domestic production, not much success has been achieved. Asia’s third biggest economy is expected to continue to be a major importer of LNG for the foreseeable future.

“LNG accounts for around 48% of India's total gas consumption of 138mn m^3/d, with the rest accounted for by domestic gas. Notwithstanding anticipated improvement in domestic gas production, following development of new discoveries by ONGC, RIL, OIL and Cairn, dependence on LNG will increase meaningfully,” senior vice president at rating agency Icra, K Ravichandran, told *NGW.*

According to Icra's estimates, LNG imports can increase at a compounded average growth rate of 10% over the next five years, which will also be aided by commissioning of new regasification terminals on both east and west coasts.

According to the latest government data, cumulative LNG imports from April 2017-January 2018 were 21.8bn m^3, up almost 7% year on year. During the last financial year (April 2016-March 2017), India’s LNG imports were up by 15.5% to 24.6bn m^3.

Ravichandran believes that going forward India’s supplier base will also widen. Some of India’s major LNG suppliers have been Qatar, Nigeria, Australia and Equatorial Guinea, with Qatar accounting for a majority share. “Going forward, the share of LNG from the US, Russia and Mozambique should increase, which will diversify our sourcing basket and reduce the supplier concentration for the R-LNG marketers,” he said.

Renegotiating US contracts will be tough

Evidence of India’s growing clout in the global LNG market shows from the fact that New Delhi has successfully managed to renegotiate long term contacts with major suppliers like Qatar and Australia in the last couple of years.

Indian oil minister Dharmendra Pradhan in December said India is now in talks to renegotiate long terms contracts with US LNG suppliers Cheniere Energy (Sabine Terminal) and Dominion Cove Point LNG LP (DCP Terminal), as well. However, it seems India may not find it that easy to renegotiate with US suppliers.

“Since the LNG market is oversupplied, with power shifting to the buyers from sellers earlier, there are good prospects for renegotiation of long-term contracts signed earlier. Having said

Kochi Terminal (Credit: Petronet)

Kochi Facility (Credit: Petronet)

that, we must acknowledge that renegotiating contracts with US suppliers may prove more challenging than contracts with project owners in Qatar and Australia. This is primarily because of the lack of precedents and water tight contractual clauses. Hence, the renegotiation process could be protracted and could involve some trade-off from the buyer side. Apart from renegotiation, there could be other ways of partly mitigating the price risks - by time and destination swaps of cargoes,” Ravichandran said.

India’s biggest gas marketer Gail has a contract with Cheniere to import 3.5mn mt/yr of LNG while with Dominion it has a deal to import 2.3mn mt/yr of LNG. Without naming India, Dominion has already denied that there is any likelihood of changes to the contract terms.

"The characterisation of contract renegotiations is false. Conversations are ongoing with export customers in preparation for beginning commercial operations but there have been no changes in the contract terms since initial contract execution, and Dominion Energy does not intend to renegotiate contract terms in the future," said Dominion in December.

Shardul Sharma